

PERIODICAL ROOM
GENERAL LIBRARY
UNIV. OF MICH.

JUN 12 1933

REVIEW of EDUCATIONAL RESEARCH

Volume III

JUNE, 1933

Number 3

PUPIL PERSONNEL, GUIDANCE,
AND COUNSELING

AMERICAN EDUCATIONAL RESEARCH ASSOCIATION

A Department of the

NATIONAL EDUCATION ASSOCIATION

1201 SIXTEENTH STREET NORTHWEST

WASHINGTON, D. C.

AMERICAN EDUCATIONAL RESEARCH ASSOCIATION

THIS Association is composed of persons who are engaged in technical research in education, including directors of research in school systems, instructors in educational institutions, and research workers connected with private educational agencies. The Association became a Department of the National Education Association in July, 1930.

Officers of the Association for 1933-34

President

PAUL T. RANKIN
Detroit Public Schools

Vice-President

T. C. HOLY
Ohio State University

Secretary-Treasurer

WILLIAM G. CARR
Research Division
National Education Association

Executive Committee

The president, vice-president, and secretary, *ex officio*, and the following past presidents:

J. L. STENQUIST
Baltimore Public Schools

WILLIAM S. GRAY
University of Chicago

EDITORIAL BOARD, 1933-34

FRANK N. FREEMAN, *Chairman*, University of Chicago

J. CAYCE MORRISON, State Department of Education, Albany, New York

HARRY J. BAKER, Detroit Public Schools
President and Secretary, *ex officio*

Active Membership—Persons eligible to membership in the Association must be recommended to the Executive Committee by a member who is in good standing. Upon approval of the recommendation, the person recommended will be invited by the Executive Committee to become a member of the Association. The Executive Committee has defined the qualifications for membership as follows:

"Membership in the Association is restricted to persons of good ability and sound training who are working in the field of educational research, and who can present satisfactory evidence in the form of published or unpublished studies which show ability to arrange, to organize, and to conduct research investigations and experiments. In addition, evidence of an abiding interest in the field of educational research is essential."

Membership in the National Education Association is a prerequisite to active membership in the American Educational Research Association. Any form of N. E. A. membership—annual, five-dollar, or life—satisfies the preliminary requirement.

Active members of the Association pay dues of \$5.00 per year. Of this amount, \$4.00 is for subscription to the REVIEW. See back inside cover page of this issue. The REVIEW is published in February, April, June, October, and December each year.

Entered as second-class matter April 10, 1931, at the post office at Washington, D. C., under the Act of August 24, 1912.

REVIEW OF EDUCATIONAL RESEARCH

Official Publication of the American Educational Research Association, a department of the National Education Association.

The contents of the REVIEW are listed in the EDUCATION INDEX

Volume III

June, 1933

Number 3

PUPIL PERSONNEL, GUIDANCE, AND COUNSELING

(Literature reviewed to approximately October 1, 1932)

Prepared by the Committee on Pupil Personnel, Guidance, and Counseling: Fred C. Ayer, A. J. Brumbaugh, H. A. Edgerton, and Arch O. Heck, *Chairman*; with the cooperation of R. D. Allen and the assistance of O. Floyd Nixon and George E. Van Dyke.

TABLE OF CONTENTS

Chapter	Page
Introduction	185
I. School Attendance	186
ARCH O. HECK, <i>College of Education, Ohio State University, Columbus, Ohio.</i>	
II. School Progress	194
FRED C. AYER, <i>School of Education, University of Texas, Austin, Texas.</i>	
III. School Marks	201
FRED C. AYER, <i>School of Education, University of Texas, Austin, Texas.</i>	
IV. Recording and Reporting	205
H. A. EDGERTON, <i>College of Education, Ohio State University, Columbus, Ohio.</i>	
V. Characteristics of Pupil Population	209
H. A. EDGERTON, <i>College of Education, Ohio State University, Columbus, Ohio.</i>	
VI. Guidance and Counseling	214
R. D. ALLEN, <i>Department of Research and Guidance, Public Schools, Providence, Rhode Island.</i>	

TABLE OF CONTENTS—Continued

Chapter	Page
VII. Extra-Curriculum Activities	222
A. J. BRUMBAUGH, <i>University of Chicago, Chicago, Illinois, as-</i> <i>sisted by</i> GEORGE E. VAN DYKE.	
VIII. Adjustments and Classifications in Colleges and Universities ...	234
A. J. BRUMBAUGH, <i>University of Chicago, Chicago, Illinois.</i>	
IX. Special Schools and Classes	238
ARCH O. HECK, <i>College of Education, Ohio State University,</i> <i>Columbus, Ohio.</i>	
Bibliography	246

LIST OF CHARTS

Chart I—Screening the Guidance Functions	216
Chart II—Organization of Guidance in a Secondary School ..	218
Chart III—The Continuous Follow-Up Survey of Senior High School Graduates	220
Chart IV—Five Screens for Selecting Counselors	221

INTRODUCTION

THE discussion of pupil personnel, guidance, and counseling might well be considered either topically or in terms of school organization. There would have been some advantages in considering the whole field of pupil personnel as it is related to the elementary school, the junior high school, the senior high school, and the college and university respectively; this procedure was considered. The topical analysis of the field was finally used, however, since it seemed, to some of the committee, to define the areas better and to prevent overlappings of materials more satisfactorily, and especially since the topical arrangement made it possible to adapt the work to the special interests of the majority of the committee members in a better way than would the other analysis.

The analysis begins with a consideration of school attendance involving its legal basis; a consideration of school progress and school marks is followed by a chapter on recording and reporting pupil data; and a survey of the characteristics of the pupil population, especially the mental, social, mechanical, and physical, is followed by a consideration of guidance and counseling. Attention is then given to some of the numerous methods which are being used to care for the individual differences which research has clearly shown exist in this present enormous pupil population; extra-curriculum activities, special adjustments and classifications, and special schools and classes are the three topics given particular attention; the second of these topics was confined solely to the college and university level since it had already been given considerable attention at the lower levels; the third topic was considered solely from the organization and administrative point of view since its psychological aspects had received consideration in an earlier review.

The development of the entire field of pupil personnel as defined by the above topics has been given serious consideration only in recent years; compulsory school attendance of an effective type did not make its appearance until the present century; studies of pupil differences and pupil progress did not fire the imaginations of teachers and administrators until well within the past two decades; and effective means of caring administratively for these differences are just beginning to be widely adopted and intelligently appreciated by our public-school teachers and administrators. The ground work is just being laid for an adequacy in caring for individual differences in children and thus for providing in reality an equality of opportunity in public education that has long been considered desirable.

ARCH O. HECK, *Chairman,*
Committee on Pupil Personnel, Guidance, and Counseling.

CHAPTER I

School Attendance

WRITINGS in the field of school attendance are abundant. Literature covering school attendance which is strictly research is scarce; there are, however, materials of a semi-research character which are valuable and which should be reported as well as materials which are strictly research.

History

Ensign (31) wrote one of the first treatises which gave England credit for the inauguration of compulsory education legislation; he traced the beginnings back to the English law of 1405. Perrin (60), writing at an earlier date, looked to the Reformation as the origin of the notion of compulsory education and cited Martin Luther's address of 1524 as the entering wedge for the establishment of universal education a few years later at Geneva, Navarre, and later in Holland, Scotland, and England; thus he sought to refute the notion that this whole idea had developed from Prussia's early orders regarding compulsory education in 1713 and 1717. Cook (19) likewise traced the origin of such compulsion to Luther and Calvin.

Ryan (65) and Harris (77) gave historical sketches of German legislation. Smith (68) reported briefly upon legislative beginnings for a great many of the European countries and for Japan. She was interested in relating literacy in the various countries to the extent to which they had compulsory schooling.

No single writer seems to have thought it worthwhile to trace the beginnings of compulsory education for each of the states of the United States. Martin (48) gave a very complete account of this development for Massachusetts; his account has been used as source material by many writers interested in the beginning of compulsion within the United States. Abbott and Breckinridge (1) traced such a development for Illinois. Bitler (9) gave a brief account of the beginnings of compulsory education in Ohio. Diley (26) and DePriest (25) gave a much more detailed history of the development of Ohio's school attendance legislation. Diley covered the early period down to 1900 and DePriest the period from 1900 to 1929. Ensign (31) traced compulsory beginnings for five states, Massachusetts, Connecticut, New York, Pennsylvania, and Wisconsin.

Harris (77) did give an account of the legal beginnings for all states which had passed compulsory attendance legislation by that date; he reported the earliest laws, the changes which were made later, and the dates of those changes. It was, however, a legalistic account. Liebler (45), in addition to giving a brief history, presented court decisions which uphold the compulsory idea. Other very brief historical summaries are

presented by Bitler (9), Deffenbaugh (23), Hanson (36), Heck (38), and Keesecker (43). There is opportunity for studying in each of the states those interests and forces which favored and opposed the acceptance of compulsory school attendance.

Legislation

Deffenbaugh (23) made the best early analysis of compulsory education laws for the United States. Hood (42) extracted from the school laws of the forty-eight states their chief attendance provisions and reported them in 1915 just at the time the last six states were passing or considering the passage of compulsory attendance laws. Bonner (12) in 1920 summarized fourteen desirable and fourteen undesirable features of the compulsory laws of the various states. According to his analysis, no state had all the desirable features although New York and New Jersey had thirteen each, Mississippi had only one, Louisiana two, and South Carolina three.

Eckard (28) made an analysis of school laws in 1924 showing compulsory ages and length of school terms; he gave special attention to exemptions. Heck (38) reported ages, length of year, and exemptions. Keesecker (43) carried his analysis much farther and analyzed all details of the enforcement of the school attendance legislation of the forty-eight states.

Enrolment

Most studies of school enrolment in the United States are based upon data collected by the Office of Education. Bonner (14) showed increases in public-school enrolment by five year periods from 1870 to 1918; the Research Division of the National Education Association (52) showed yearly increases from 1915 to 1926. Between 1870 and 1918, public-school enrolment had trebled, and high-school enrolment had increased twenty fold. The National Education Association (54, 55) and Phillips (61, 62) compared the forty-eight states as to the amount of schooling afforded; enrolment and attendance played an important part in making these comparisons.

The size of the high-school problem in the United States was shown by Phillips (63) and by the Department of Superintendence (50); in 1925-26 there were 21,700 high schools with 3,800,000 pupils reported by 18,157 schools. The New Jersey Department of Public Instruction (56) studied its state growth in high-school population since 1900, and Bailey (6) studied Ohio's growth between 1860 and 1890. Bonner (15) showed, upon the basis of 1,000 pupils in the fifth grade, the enrolments in each successive year through college; he also showed (13) that private high schools have had a relatively small growth; denominational secondary

schools accounted "almost wholly" for this growth; this denominational growth was chiefly due to increased enrolment in Roman Catholic schools. The Alberta Teachers' Alliance (41) showed that high schools in Canada enrolled considerably fewer pupils per 1,000 population than did high schools in the United States.

For several years Walters (78) has reported the enrolments of colleges and universities; some of his later reports cover over four hundred institutions. Edwards (29) studied college and university enrolments as related to economic depressions; there is a decided correspondence with a one to two year lag except for graduate schools where increased enrolments, with the exception of 1918, have been continuous since 1890; the acceleration has been less, however, in graduate enrolments during depressions.

Amount of Attendance

Deffenbaugh (23) related average days that schools are kept open to average number of days attended by each pupil enrolled and arrived at a percent of attendance for each state; 71.3 percent is reported as the national figure. Bonner (15) made an analysis of the statistical reports of the Commissioner of Education which showed that all pupils completing their education in 1918 had had 1,076 days of schooling or 6.7 years based upon a school year of 160 days. He showed also that 5,000,000 children are out of school daily; the average child wastes 25 percent of the term. These percents vary from 40 in Arizona, Oklahoma, Alabama, and Kentucky to 10 for Indiana, Oregon, and Ohio. The National Education Association (55) based percent of attendance upon enrolment and average daily attendance (A. D. A.); this gave 82.9 percent for the United States in 1930; the states varied from 74.2 to 89.4.

Using Deffenbaugh's definition of percent of attendance, the Research Division of the National Education Association (51) compared attendance over a period of years from 1880 to 1925 showing an increase from 62 to 81 percent; these data are shown for the forty-eight states. Bonner (14) compared state school systems by using (a) a percent based upon enrolment and A. D. A., (b) average number of days attended by each pupil enrolled, and (c) average number of days attended by each child five to eighteen years of age. These data covered the period from 1870 to 1918 by five year intervals. The Research Division of the National Education Association (53) compared urban and rural attendance; it also compared one-teacher schools with consolidated schools.

Ayres (4) in an early study of cities found percent of attendance as low as 66.2; some of the best were 82.3 and 81.3. He said that less than three-fourths of the pupils attend three-fourths of the time. Cooper (20), in studying 1,058 pupils from their date of entering school in 1915 for the next eight years, found that on the average they attended six and one-

fifth years; they were absent one and one-fifth years; and they were not enrolled three-fifths of a year. Boys missed most during the first four years; girls had a heavy non-attendance record for the last four years. Ayer (2) in a study of 72,120 children in the rural schools of ten states presented evidence to show that half the children attended less than seven and one-half months; that 25 percent attended less than five months; and 13 percent attended less than three months. Bolt (10, 11) more recently studied attendance in a university high school over a period of years; good records were kept; the amount of absence averaged from 5 to 6 percent. Obviously the university high-school attendance would far exceed that of the average high school due to difference in pupil personnel.

Heck (38) reported a great variation in percent of attendance due to (a) variation in rules for figuring the percent, (b) variation in rules for determining enrolment, and (c) variation in defining what a day of attendance is. There is great need of (a) national uniformity in these definitions, (b) uniform records and reports, and (c) compulsion in reporting data if comparable national and state statistics are to be secured.

Systems of Enforcing Attendance

The outstanding study is that made by Emmons (30); he visited fifteen cities and reported in detail, not upon what they claimed they did but upon what he discovered by personal investigation that they were actually doing. Bermejo (7) studied more cities, having 371 which reported, but he used a questionnaire to obtain his material; his findings, therefore, need to be discounted somewhat. Both studies aimed to discover practices followed by city school systems in enforcing compulsory attendance legislation. Nudd (57) described in considerable detail the organization and the procedures followed in Philadelphia in an attempt to improve school attendance. Strayer and Engelhardt (69, 70, 71) studied the actual work of attendance departments in a series of city school surveys.

Hanson (36) studied the organization set up by cities and rural districts in New York state to enforce attendance; this varied from a part-time official to an elaborate city organization. Heck (38) contrasted the old and new attitudes toward attendance service and showed the effect of this change in attitude upon the type of organization that will be employed. Studies need to be made of the effectiveness of the newer type of organization; theory favors it. If, however, some one could experimentally demonstrate the truth or falsity of the claims now being made, progress in assisting pupils would be more rapid. The need of research at this point is great.

The School Census

These studies revolve about an analysis of legal regulations in the states and of the actual practices followed in public-school systems.

Hood (42) assembled all state regulations governing the census. Keesecker (43) and Heck (38) analyzed the legal provisions and showed what seemed to be typical legal requirements. Whereas most of the early census age requirements extended from five, six, or seven to twenty-one, some recent laws require a census from birth to eighteen or twenty-one.

Emmons (30) analyzed practices in fifteen cities and recommended a continuous census from birth to twenty-one. Bermejo (7) and Birkelo (8) used the questionnaire, the former in 371 cities and the latter in 20; the continuous census was favored. Hanson (36) found the continuous census in operation in fifteen New York cities. Almost universally, however, a continuous census is urged without any research showing the feasibility or value of such a census.

Attendance Officers

Denius (24) and Keesecker (43) analyzed the legal requirements concerning attendance officers; they studied designation, qualifications, salary, and powers. Hanson (36) studied the previous occupation, qualifications, and ages of attendance officers in New York state. Sloan (67) made a questionnaire study of the qualifications, interests, previous occupations and salaries of county attendance officers in Ohio. Liebler (46) interested himself in the qualifications and compensation of attendance officials. The trend of the recommendations is in the direction of a more liberal preparation, a wider experience in educational and social work and higher pay. Heck (38) pointed very definitely in this direction in his recommendations. But again we need research which will clearly demonstrate the extent to which such requirements would improve the service.

Truancy

Abbott and Breckinridge (1) gave a specific meaning to the term *truancy* which is lacking in many studies; they define it as "wilful absence" from school without the parents knowing about the absence. In many general writings the term is used as synonymous with non-attendance. The term as defined by these writers serves to designate a type of non-attendance more serious in nature than ordinary non-attendance. Hanson (36) and Hiatt (40) are in agreement with this definition. Hiatt reported the causes of truancy for one hundred selected cases in Philadelphia and outlined some procedures for caring for truancy. Hanson indicated that truancy is a minor factor in non-attendance.

Causes of Non-Attendance

Illness of the child is commonly reported as the chief cause of non-attendance among children who are enrolled. Abbott and Breckinridge (1), Bermejo (7), Foster (33), and Bolt (10, 11) agreed in suggesting

illness as the most potent single cause. Their investigations were based upon (a) home investigations where the parents report causes, (b) school records, and (c) questionnaire reports from school districts. Bonner (15) emphasized the lack of legal requirements although he does not suggest that it is the chief cause. The Coopers (20, 21, 22) pointed to agricultural work, other work, parental indifference, and illness of child as the chief causes. They (21) pointed out that agricultural work and parental indifference are the greatest causes of non-attendance for boys; for girls the leading causes are parental indifference, illness, and other work.

The United States Children's Bureau and the National Child Labor Committee, in a series of studies (17, 18, 73, 74, 75, 76) of farm children in Colorado, North Dakota, Texas, New Jersey, Maryland, and Virginia, indicated that farm work was a large factor in non-attendance. Children in representative farming communities were studied by home visitation. Reavis (64), in a study of one-room schools in Maryland, related some fifty factors to the amount of attendance. On the basis of partial correlations, he concluded that distance, school progress, and marks received were the most important factors in causing non-attendance where transportation was not furnished. Marksbury (47), by means of immediate daily follow-up of all non-attendance for a year, decided that illness was not nearly as great a factor in non-attendance as is sometimes reported.

How To Improve Attendance

Marksbury (47) and Abbott and Breckinridge (1) recommended prompt, persistent follow-up of all cases; adjusting school work to the child was also noted. This latter plan was emphasized by Hiatt (40). The Research Division of the National Education Association (53) and Heck (38) summarized a number of procedures which might be made a part of an all-year program for a school seeking to improve its attendance. Careful research as to the effectiveness of the various devices used, however, is largely lacking. We need to combine research with the administration of our schools in order to eliminate useless devices and practices.

Results of Non-Attendance

Ayres (3, 4, 5), the Coopers (20, 21, 22), Farley (32), and Ziegler (79) pointed to non-promotion as an important result of non-attendance. The Coopers and Ziegler made studies which are by far the most important. The Coopers studied non-enrolment at the opening and the close of the term as well as absence which occurred during the period of actual enrolment. Ziegler found a noticeable positive correlation between school attendance and school progress by the use of partial correlations. He concluded, however, that "it seems probable . . . that the school attendance-school marks and the school attendance-school progress rela-

tions are not simple relations which can be interpreted as direct causes and effects. A poor school attendance, however, is a danger signal of a condition to be investigated." Odell (58) observed that "on the whole attendance appears to be a factor conditioning achievement, but not so weighty a factor as many have believed." The problem of what are the total effects of non-attendance is one which deserves much more attention than it has received in the past.

Effectiveness of Present Legislation

Smith (68) contrasted compulsory attendance legislation and percent of the entire population attending elementary schools with illiteracy ratios for the various countries of Europe. There was a decidedly inverse relationship; for example, she reported Russia with 70 percent illiteracy and 2.56 percent of population in school, while England had .03 percent illiteracy and 16.87 percent in school.

The Maryland Department of Education (49) showed a decided increase in attendance at the close of the first year of state-wide compulsory school attendance. Hand (35) contrasted the compulsory legislation of the various states with illiteracy within those states; the contrast is decidedly favorable to states with good legislation.

Ohio has the record of the longest compulsory age span for the forty-eight states; many other features of its law are noteworthy. Several studies have been made regarding the effectiveness of its laws. Bitler (9) made a questionnaire study within a year of the passage of the so-called "Bing Law" of Ohio; school superintendents reported quite favorably. Heck (39) directed a cooperative study which sought to answer a number of questions concerning the law's operation. The findings in general upheld the present law but pointed out the desirability of (a) securing trained attendance officers, (b) giving wide publicity to all provisions of the law, (c) enabling youths who lose jobs to attend continuation schools instead of forcing them to return to regular schools, (d) administering certification to work so that a hardship will not be put upon the youth, and (e) making more extensive adjustments within the public schools to meet the needs of pupils.

In conjunction with the above study, Gibbons and Stansbury (34) studied all youths fourteen to seventeen inclusive in Middletown, Youngstown, and Toledo, Ohio; Booher (16), Durbin (27), Kuntz (44), and Overholt (59) reported on similar age groups for county school districts. All these studies sought to account for every youth of the four age groups and to determine to what extent they were complying with the law. Another group of studies sought to determine to what extent youths in high school were being forced to attend because of this same Bing Law. Haws (37), Severs (66), and Thomas (72) agreed in finding that social forces rather than compulsory attendance legislation were holding young people

in high school. The studies were based upon questionnaires which were completed by the students. Names were not attached and all evidence indicated that the students did the job seriously.

Exemptions

Deffenbaugh (23) analyzed the exemptions allowed under the compulsory school attendance laws of the forty-eight states as early as 1914. Eckard (28), Heck (38), and Keesecker (43) brought these facts up to date at later periods. All agreed that many of the states have such general and indefinite exemptions that the law itself could be practically nullified if the local authorities were inclined to be overly lenient. Eckard, who reported in considerable detail, mentioned such phrases of exemption as "good reasons," "any good sound reason," "any unusual cause," "unusual cause," and "in extreme cases of emergency."

Costs of Attendance Service

Hanson (36) made the only extensive study of costs of attendance service. His study covered only one state, New York, but was generally representative of that state. Salary costs and total costs were nearly the same. In many districts they were identical; this was especially true of the smaller districts. The median for towns was \$34.35 per year; the median for towns and villages was \$65 per year; for villages over 4,500, \$395 per year; and for third class cities \$840 yearly. Since 1912 these costs had increased 253 percent; they were, however, less than 1 percent of the per-pupil costs.

More needs to be known concerning the costs of enforcing our compulsory school attendance laws in terms of services rendered. Until this is done we fail to know not only to what extent money spent for such enforcement is wasted, but also to what extent the service may be injurious to the best welfare of the children it is supposed to serve.

CHAPTER TWO

School Progress

SCHOOL progress as used in this chapter is limited to those aspects of progress which have been treated in studies of age-grade status, promotional progress, and school elimination. Inasmuch as school progress has been taken frequently as an index of general school success, the topic extends into a number of related aspects of educational organization and progress which have been treated elsewhere in this or other numbers of the *Review of Educational Research*. This is particularly true of those sections which have treated curriculum adjustments, classification of pupils, testing, and school organization. We will consider only the technical and quantitative aspects of school progress.

It is difficult to state accurately when reliable research in school progress began. Its beginnings are usually linked with the opening of the present century. Many early studies appeared in the *Psychological Clinic*, a periodical edited by Professor L. Witmer, which began publication in March, 1907. In a review of the study of retardation up to 1910, Witmer (172) stated that attention was first given seriously to conditions of retardation among school children in 1895. During the first decade of the present century, studies by Cornman (109), Ayres (87), Falkner (115), and Thorndike (163) brought into light the more significant factors of school progress, revealed the lack of completeness and standardization in child-accounting data, and arrived at a number of important conclusions and ingenious guesses as to the actual status of school progress. These and other studies were given a brief critical review in 1911 by Blan (92) who added a study of retardation in five cities.

The second decade of the present century witnessed widespread extension of the earlier studies, particularly those of a statistical character. These became so numerous that it is quite out of the question to report them separately by title. It became common practice for city school superintendents to incorporate age-grade studies in their annual reports. Volkmar and Noble (169) made a study of retardation in 1914 on the basis of one hundred city school reports. Beginning with Thorndike (162) in 1907 and Strayer (157) in 1911, the U. S. Bureau of Education began giving serious attention to the publications of elimination and age-grade studies. Led by Ayres, Bachman, and Strayer, age-grade studies with gradually improving technic became a fundamental part of the school survey movement of the second decade. This decade, beginning with Van Denburg's *Causes of the Elimination of Students in Public Secondary Schools of New York City* (168) and ending with OBrien's *High School Failures* (145), gave birth to a widespread series of master's and doctor's theses involving numerous aspects of pupil progress and the closely re-

lated factors of census, attendance, and guidance. The decade also witnessed the adoption of numerous practical devices, such as semi-annual promotion and special classes, to care for individual differences.

The school progress research studies which were typical of the second decade were continued into the third decade. City school reports, state school reports, school survey reports (105, 154), theses (166), and special studies of pupil progress continued to flourish in increasing abundance but unfortunately with little improvement in technic or general constructive significance. The organization of city and state departments of educational research contributed materially to the number and in some respects to the refinement of school progress studies. The publication of the two yearbooks on articulation by the Department of Superintendence of the National Education Association (143, 144) in 1929 and 1931 recognized and added to a recent spurt of interest in this field (165). These new studies have tended more and more to relate school progress to such other factors of educational progress as mental age, educational age, ability grouping, subject difficulties, curriculum-adjustments, and entrance problems.

Age-Grade Status

The early studies of school progress were chiefly concerned with the relation between the ages and the grades of school children. By an analysis of age-grade tables attempts were made to ascertain such data as the amount of retardation, acceleration, and elimination of pupils. Ayres' epoch-making study, *Laggards in Our Schools* (87), in which he criticized the technic of Thorndike's Bureau of Education elimination study (162), together with the answering criticisms of Ayres' technic brought into relief a number of technical and factual problems of pupil progress which still occupy the center of the stage in this field of research. The more outstanding of these problems follow:

1. What is the normal age for a given grade?
2. What method should be used for computing pupils' ages?
3. What proportions of pupils are over-age, normal, and under-age for grade?
4. What is the status of pupil transfer and migration?
5. What age-grade differences exist between sexes and among races?
6. What are the causes and remedies for age-grade maladjustments?
7. What rates of progress do pupils make through the grades?
8. What is the ratio of skippers to repeaters?
9. What is the money cost of the repeater?
10. What are the facts and conditions of entrance?
11. What are the facts and conditions of elimination?
12. What administrative adjustments affect pupil progress?

The first five of these problems concern age-grade status. Lack of agreement as to what constitutes normal age for a given grade has been the chief cause of unreliability among the thousands of reports on the relative percents of over-age, normal, and under-age pupils. Ayres (87) and

many others have used a two-year normal-age span with six to eight years for the first grade and seven to nine years for the second grade; this assumes that the normal increase in age for each grade is one year. Many investigators have used a one-year span for normal with six to seven years for the first grade and seven to eight years for the second grade. A three-year span and a year and one-half span (158) have also been proposed. The problem has been complicated further by the use of semi-annual promotional groups. Heck (122) proposed five years nine months to six years nine months for the 1B grade; six years three months to seven years three months for the 1A grade; and so on. These figures are given in detail to indicate the present impossibility of comparing the results of different age-grade studies.

Comparisons are further complicated by the use of different systems of computing ages; the nearest birthday and the last birthday are the two most common bases of computation. The time of year for taking the ages is another source of variability. September first appears to be gaining rapidly in favor as the basic date. Lucky (135), by using different methods of computation for the same group of 4,679 elementary-school pupils, found that the number of over-age pupils increased and the number of under-age pupils decreased about 3 percent a month as the time of taking the ages was advanced from September 1 to October 1 and so on throughout the year; that a two-year span increased the number of normal pupils approximately 25 percent over a one-year span; and that to use six years instead of five in the first year, etc., for the under-age group increased the under-age group approximately 40 percent, and decreased the over-age group approximately 10 to 25 percent according to the length of the normal span used.

Despite the lack of standardized procedure in computing results, a number of important discoveries have ensued from age-grade studies. In indicating these it is possible only to refer to illustrative examples, no attempt being made to identify the hundreds of references the writer has at hand. From Ayres' study (87) on down, a comparison of age-grade distributions indicates great variation in the percents of retarded children in different systems and in different schools in the same system. Volkmar and Noble (169), in a study of school reports, found many variations in retardation; three cities in 1906 had retardation ranging from 21.6 to 49.6 percent, and eleven cities in 1912 had retardation ranging from 8.2 to 63.1 percent. It was found in 1924 (84) that the percent of over-age elementary pupils in nine large cities varied from 45 to 79.7 and that the percent of under-age pupils varied from 1.3 to 14.3; the percent of over-age pupils in 77 Seattle schools varied from 21 to 63 and the percent of under-age pupils varied from 0 to 25. An age-grade study (93)¹ of

¹ This publication contains a footnote reference to a manuscript issued by the Bureau of Research and Statistics of the State Department of Education in Massachusetts in 1927, in which the figures quoted are found.

352,692 elementary and high-school pupils in Massachusetts in 1926 showed 26.1 percent of the pupils under-age, 61.9 percent normal age, and 12 percent over-age.

Cooke's study (105) of fifty-nine school surveys from 1908 to 1928, involving two and one-half millions of pupils, shows a total of 21 percent accelerated, 48 percent normal, and 31 percent retarded. Rural-school retardation was practically twice that of city; acceleration increased from 1908 to 1928, retardation remained constant, and normality decreased. Retardation increased from the first to the fourth grade, was constant from the fifth to the eighth, and decreased from the ninth to the twelfth. Just the reverse was true of normality, while acceleration remained constant from the first grade to the twelfth. Numerous other studies (83, 93) confirmed the relatively larger amounts of retardation in rural schools.

Pupils unable to speak English on entering schools are temporarily but not necessarily permanently retarded (124); it is difficult to isolate ability to speak English from such factors as intelligence, late entrance, home environment, social status, and migration (141). The home language is not of great retarding significance (101), but some races and nations show definite variations in retardation (101, 105, 143, 144, 171). Transfers and family migration are definite causes of retardation, particularly where methods, content, and texts vary (107, 114, 141, 153). Over 45 percent of California's high-eighth grade pupils moved two or more times from system to system; almost 71 percent moved at least once (88). Boys are usually older for their grade than girls (108), but sex differences are becoming less apparent, and there is a growing tendency not to segregate boys and girls in statistical data.

Many of the school reports (146) and a number of special studies (144) indicate that actual retardation is decreasing. Many indirect conclusions concerning pupil progress have been drawn from age-grade studies; these conclusions will rest upon a securer foundation when based upon the types of study immediately to follow.

Promotional Progress of Pupils

The present section is concerned with studies which compute the actual progress of pupils rather than their age-grade status. Under commonly accepted progress standards, the normal pupil progresses one grade per year; the retarded (slow) pupil takes more than one year per grade; and the accelerated (rapid) pupil takes less than one year per grade. There are usually about as many slow pupils as over-age pupils (86) and as many rapid as under-age pupils; but they are not the same individuals. Cooper (106) found among Delaware school children that one 1915 entrant out of every twenty made rapid progress; one out of every four made normal progress; and seven out of every ten made slow progress. The *Ninth Yearbook* of the Department of Superintendence

(144:17-180) deals comprehensively with pupil promotion problems. The *Eighth Yearbook* of the Department of Elementary School Principals (95) treats briefly the problem of pupil failure. Many aspects of promotional progress are treated briefly by a committee of the American Educational Research Association (111). Only a few of the hundreds of promotion, failure, and elimination studies that have been made in recent years can be mentioned. These will pertain chiefly to the factors which influence rate of progress. Many of the references cited contain bibliographies.

Attendance at kindergarten has little or no effect upon subsequent school progress (138, 149). Pupils entering the first grade at six years of age apparently are more successful than those who enter at any other age (83, 130, 134); the factors of mental age and selection are given some slight attention, however, in this generalization. Due to the rapid promotion of the brighter pupils, the brightest pupils in high schools and colleges are usually the youngest (127, 140, 161). These younger pupils are superior in extra-curriculum as well as academic activities (133). Chronological age is the chief factor in determining entrance to the first grade; teacher's estimate to the high first; and reading ability to the second grade (96, 144, 150). Mastery of minimum essentials in major subjects is the leading basis of promotion from the sixth grade to the seventh grade; subjectmatter achievement from the eighth to the ninth grade and from the ninth to the tenth grade (144). Graduation from high school is universally based on the completion of a specified number of academic units (144); the requirements being thirty-two semester credits in thirty-five states, and thirty semester credits in ten states (123). A few school systems (117, 167) have set up definite promotional standards for the various grades, but your reviewer is almost baffled by the number of studies (91, 122, 144, 151) which show a lack of objective standards for promotion and consequently a great variability in the percents of promotion. Fritz (118) found that pupils progress through grades seven, eight, and nine in less time in 6-3-3 schools than in 8-4 schools; but progress rate in the lower tenth grade was slower in 6-3-3 schools.

Many arguments and a little evidence, both fairly evenly divided, have been adduced for and against semi-annual promotions (81, 83, 120, 128, 144). With the development of less costly promotional and classification devices, the popularity of semi-annual promotions is apparently on the wane. Three hundred eighty-one superintendents out of five hundred favor trial promotions (99, 129, 137); the evidence shows that the majority of trial promotions are successful. Chauncey's study (102) of home environment indicates that inferior homes retard and superior homes accelerate school progress. Special promotions and accelerated classes for bright pupils have also been uniformly successful (80, 121, 125, 144). Numerous case studies have been made (82, 89, 132, 136, 144, 155, 170, 173) which indicate that retarded progress in a given subject may be speeded up by

special drills and individual attention. Current practices in high-school promotion (144) aim with some success toward improved classification of pupils resulting in smaller percents of elimination and retardation.

Studies of pupil failure have been made with great frequency but rarely with sufficiently expert care to uncover the actual causes of failure. Failure in promotional progress in elementary schools is practically always greatest in the first grade; next, with many exceptions, in the second grade; and usually least in the eighth grade (122, 144). The elementary subjects giving rise to the greatest number of failures are arithmetic, reading, language, and geography (85, 144). Great variability exists between subjects, teachers, buildings, and school systems as to the relative numbers of failures occurring.

Many causes have been assigned to failure. Edmonson (113) listed thirty explanations for the causes of excessive failure. Coleman (104), in a study of magazine and periodical literature, found 113 causes distributed among 15 general groups of causes. Among the chief causes of failure most frequently mentioned are low mentality, poor attendance, lack of interest, language disability, poor study habits, physical defects, and poor school or administrative conditions (95, 139, 142, 152, 159, 161). Pupils assign essentially the same causes to failures as their teachers, except that they mention "lack of ability" much less frequently (94, 119, 173). Pyle (148) found that 28 percent of the poorest students in high school excelled the best students in some aspects of learning ability. Intelligence is a significant but not necessarily the dominant factor in learning Spanish (126).

Many administrative devices have been utilized to eliminate failure and decrease retardation (95, 97, 99, 112, 122, 143, 144, 156), but, unfortunately, little careful study has been made of the outcomes.

Elimination of Pupils

Ayres (87) reported in 1909 that "the general tendency of American city-school systems is to carry all of the children through the fifth grade, half of them to the final elementary grade, and one in ten to the final year of the high school." This summary statement has been followed by many calculations and investigations of the elimination of pupils from school. Lack of basic census, age, school entrance, and school transfer data and variability in the methods of estimating elimination detract, to a large extent, from the reliability of many of the numerical generalizations which have been made concerning elimination. The results of the majority of these studies need to be interpreted in the light of the accompanying data. As a whole, the studies in elimination concern themselves chiefly with two major aspects: (1) the extent of elimination and (2) the factors of elimination.

The simplest way to reveal pupil elimination is by comparison of successive grade enrolments. These figures are complicated by the fact that

retardation increases the lower grade enrolments at the expense of the upper; giving this factor and the factors of deathrate and birthrate due allowance, it seems evident, from comparative grade enrolments, that practically all native white school children who enter survive to the fifth grade (164) and then gradually drop out of school in increasing numbers through the remaining elementary-school, high-school, and college grades. Phillips (147:11-12) of the U. S. Office of Education says:

A careful study of survival rates made by the office in 1918 shows that of every 1,000 pupils reaching the fifth grade at that time, 634 reached the eighth grade, 342 entered the high school, and 139 were graduated. . . . Making allowance for duplication, it is now estimated that of an original 1,000 entering the public schools for the first time, 974 reach the sixth grade, 855 reach the seventh grade, and 768 reach the eighth grade. No data are available concerning the number of pupils who complete the work of the eighth grade. Of the original 1,000, the number entering the first year of the high school is 610, while 438 reach the second year, 321 reach the third year, 268 reach the fourth year, and 260 are finally graduated from high school.

Koos (131) and others presented data to show that the high points of enrolment shrinkage occur between the eighth and ninth grades and between the ninth and tenth grades; a few studies (84) show the high point, particularly in the larger cities, to occur between the tenth and eleventh grades. City schools as a group hold their pupils longer than rural schools (131), but there are striking variations between school systems of the same size and among the various states (84, 147, 164).

Many causes have been assigned to the elimination of pupils. From Van Denburg's early study (168) on, the factor of age has been emphasized as a chief contributing cause (131, 145). When the compulsory attendance age is passed, children too old for their grades are inclined to drop out of school. Pupils unable to measure up mentally to course standards tend to leave school at an early date. The factor of lack of mental ability underlies many of the other causes assigned to elimination, such as poor marks, retardation, unsatisfactory courses, and lack of interest (103, 131, 161). Counts (110) gave an excellent account of the influence of the economic status of the family upon school leaving which is accelerated by lower standards of living. Here, again, the factor of intelligence plays a significant part. Van Denburg (168), Counts (110), Barden (90), and Taylor (160) showed significant national and racial differences with respect to elimination; Southern European, Negro, and Mexican children being particularly susceptible to school-leaving influences. Other causes of elimination frequently mentioned include desire to work, traditions, sex, ill health, late entrance, and lack of educational facilities. Numerous corrective devices (100, 116), both within and outside the school, have been suggested or set up to counteract the influences of premature elimination, but beyond the generally improved status in the past decade, there is little evidence at hand concerning the actual values of various administrative practices.

CHAPTER THREE

School Marks

THE term *school marks* applies both to marks given in connection with tests or examinations and to marks given at the end of a school term. Students of educational research gave early attention to this field of investigation and some of the best studies are the ones made from fifteen to twenty years ago. These studies have been reviewed so frequently by writers of various texts in education (197, 223, 231, 238) that despite their peculiar merit little detailed mention need be made of them here. Odell (222) included the more important studies in his comprehensive bibliography dealing with examinations and school marks up to 1929. The treatment of school marks given in this chapter will be restricted to marks as such and will touch very lightly, when at all, upon such related topics as examinations, standardized tests, prediction, and guidance.

Distribution and Reliability of Teachers' Marks

Studies reported in the previous chapter indicate that teachers vary greatly in their standards of assigning failure. Numerous investigators, Meyer (216), Dearborn (184), Gray (195), Finkelstein (187), Kelly (208), Wright (244), and others, have shown that teachers at all levels, elementary school, high school, and university, vary greatly in the relative percents of the different marks which they give to their pupils. Johnson's study (206) shows, for example, the following variations:

	A	B	C	D	F
First Teacher.....	7%	22%	47%	16%	8%
Second Teacher.....	36%	30%	24%	6%	4%

One University of Missouri professor gave the mark "A" to 55 percent of his students, and the mark "F" to 2 percent; another gave the mark "A" to 1 percent of his students, and the mark "F" to 28 percent (216).

The mounting mass of testimony concerning the variability of marking standards in public schools and colleges led to a long series of studies (204, 217, 219, 232, 237, 243) attacking the reliability of teachers' marks. Only a few of these can be mentioned. The special bibliography of Odell (222) and the chapter bibliography of Good (191) include many titles of studies in this field. Ruch (226) has an excellent chapter and bibliography on the reliability of marks; this includes reviews of his own and a number of other important studies.

Such studies show, first of all, that different teachers marking the same answer or the same examination paper tend to vary materially in the marks assigned; Starch and Elliott (232) found that 142 English teachers marked the same examination paper in high-school English all the way

from 64 to 98 on a percent scale basis. They showed, secondly, that a teacher marking the same examination paper at successive intervals of time varies materially in her own marks; Ashbaugh (175) found that forty-nine students rating the same set of problems after a month's interval varied on the average of 8.1 points from their own original marks and on a third trial at the end of a second month varied 7.3 points; Hulten (203) found that fifteen out of twenty-eight teachers rating five compositions from the Hudelson English Composition Scale in December and again in February would have failed the same child in February that they passed in December. Third, the same evidence of the lack of reliability of teachers' marks appears regardless of subject, level of instruction, or type of subjectmatter (199, 217).

There is, however, some contradictory evidence (198, 207, 221, 234, 237) to indicate that teachers' marks are sufficiently reliable to have certain predictive values as to future scholarship; pupils tend, on the whole according to these studies, to repeat previous achievements at the same qualitative levels. Gilkey's study and review of previous studies (190) shows that the correlations between high-school and college success in the same subjects are low.

Factors Affecting Teachers' Marks

Personal factors, such as differences in teachers' standards of severity or differences in the elements which teachers think should enter into a mark, are the chief causes of the variation and lack of reliability in teachers' marks (223, 231). A great many factors have been checked and reported; a number of them have been partially isolated. Shepherd (229), for example, experimented with 225 graders marking the same composition written both in quality 90 (Ayres Scale) penmanship and in quality 30 penmanship; the result was that the quality specimens were related approximately 10 points higher than the quality 30 specimens. Lauterbach (209) found that typewritten papers received no higher marks than those hand written. Morton (218) found a .432 correlation between conduct and marks in school subjects. Connor's study (180) showed similar results. Lentz (210) found that women teachers showed a slight preference for girls. Hughes's study (202), coming at it from another angle, indicated that the honor student in contrast to the non-honor student possessed in a higher degree such traits as persistency, sense of accuracy, respect for authority, cooperativeness, and forcefulness of personality; and that he excelled in the ability to use language, even though his mental ability may not have been so high as the non-honor student.

The purposes and effects of marks have been well analyzed by Wood (243), but outside of the elimination studies reported in the previous chapter there is a dearth of experimental material at this point. Charles's study (179) indicated that freshmen received less than their proportionate

share of superior marks and more than their share of inferior marks when in competition with more advanced students.

Consideration of mental ability leads to an array of studies (188, 193, 230, 240) which indicate the increasing influence of such factors as intelligence and objective achievement upon teachers' marks. While we are concerned here only secondarily with factors of this type, it will not be out of place to consider briefly some of the factors tending to standardize teachers' marks. Starch (231) and others uncovered evidence that the marking units which prevail under the percent system are too small for accuracy. This has led gradually toward the general adoption (175, 186, 227, 242) of five-, six-, or seven-point systems; the five-point systems of marks, such as A, B, C, D, and E, is the most popular (214).

Kelly (208), Whitten (242), Odell (223), Ruch (226), and numerous others have shown that the use of standardized tests, objective examinations, and descriptive specifications of the meaning of different marks tend to reduce their variability. Beginning with the *Missouri Plan* (215), the use of the normal curve, ranking, and the use of weights to govern the distribution of marks has received widespread discussion and experimentation (see previous references). The most recent studies include those of Abell (174), Corey (181), Davis (183), Holy (201), Matthews (213), Nicol (220), and Potthoff and Barnett (224). The consensus of these studies indicates that the practice of ranking and the discreet use of the normal curve tend to reduce the variability and unreliability of teachers' marks. The evidence concerning the value of weights is contradictory.

Marking Systems

The important pedagogical and administrative values attached to marks have induced many students of the problem of school marks to attempt various reconstructions of the old percent system of marking. To a certain extent, these systems represent the practical outcomes of research and, as such, are deserving of mention in this review. Since Meyer's first discussion (215) of the *Missouri Plan* in 1911, many practical treatments of this topic have appeared. Such, for example, are those of Rugg (228), Johnson (205), Camp (178), Ruch (226), McCormick (211), and Odell (223). These treatments of the marking system concern themselves with the symbols to be used, the proper distribution of marks, what marks should be based upon, descriptive standards and specifications, ranking, sectional marks, and related topics. The several systems vary all the way from an attempt to keep pupils unconscious of marks and marking systems (235), up through the simple "passed or not-passed" plan of marks (194), to systems which attempt to describe in detail the preparation, effort, attitudes, and achievements associated with each mark (212, 225). The chief values of these marking systems rest upon the objective clarity with

which they are understood by teachers, pupils, and parents and the degree to which they rest upon valid and reliable measurements. To this extent they are truly scientific.

Miscellaneous Practices and Adaptations

Finally, brief mention should be made of several typical studies dealing with certain miscellaneous practices and adaptations associated with pupils' marks. Ayer and Votaw (176), Dostal (185), Foster (189), and Weld (241), for example, constructed practical calculating devices for translating various types of teachers' marks and numerical scores into terms of letters which give due regard to weighting, standardization, and the principles of distribution. Hager's plan (196) to mark shop projects by scoring the factors of speed, accuracy, quality, approach, attitude, and tests by a numerical point system based on descriptive specifications is representative of other attempts to standardize the grading of special types of achievement. Curtis and Woods (182) presented a study involving the pedagogical values of pupils correcting their own papers during critical discussion. Goodrich (192) found that the average sixth-grade class in spelling, which marks papers from 98 to 98.5 percent correctly under ordinary conditions, can be trained to mark 99.5 percent correctly. Sumner's study (236) indicated that students as a whole over-estimate their marks in direct proportion to their pooriness as students. Cahoon (177), Hill (200), and Steinway (233) treated various aspects of the problem of recording and reporting grades. Messick (214) and Trabue (239) offered excellent treatments and bibliographies involving the problem of reporting pupils' marks to parents. Many of the standardizing plans mentioned in the foregoing review are fully as arbitrary as they are scientific in character; the general tendency, however, is to rest them as fully as possible upon objective data. The related research studies which bear upon the technical construction and improvement of standardized tests and written examinations are not included in the present review.

CHAPTER IV

Recording and Reporting

RECORDS stand for individuals. They give the information collected by many to bear on the problems of the individual. Records are valueless unless objectively collected. Records are valueless unless they can be interpreted by those who must use them. Here arises the problem of what norm is the most appropriate. For certain types of research the records are no good unless research technics are available for the utilization of the record. Statistics of qualitative data, geometric coding, standard scores, etc., are examples of such research technics. There are definite technics of record making just as there are definite technics for the interview (251) and the questionnaire (325), for the most part not known or collected in one place.

There is no great number of articles which one can identify beyond doubt as research in school records and record technics. Most of the articles in which records are considered point directly or indirectly to needed researches. As recently as 1928 we find the statement that the state of public high-school records is chaotic beyond all defense and only in the methods of sending credits to colleges have our high-school principals insisted upon and secured uniformity. That even this "uniformity" is considered inadequate is illustrated by the number of articles pointing out the items which a high-school record should furnish. Most of these are distinctly personnel items. Aside from the articles devoted primarily to records, others (252, 284, 289, 292, 294, 310, 313, 315) express the need for better records, especially records which are more than attendance and scholarship records.

If records are to stand for individuals, there arise such questions as what records should be collected, when records should be collected, in what units record items should be expressed, and so on.

Essential Records and Items

In the literature on records the phrase "essential records" appears many times. In no case are objective technics given which would enable one to determine just what records are essential, or what constitutes essentiality. To a large extent the essentiality of records is a matter of state law, rules of accrediting agencies, or of private opinion. Such rules are typified by the following taken from the accrediting standards of the North Central Association: "Accurate and complete records of attendance and scholarship must be kept in such form as to be conveniently used and safely preserved" (307). State requirements often specify the particular record form to use as well as the data to include. Research needs may make certain records essential for a period of time.

Heck (281, 282) listed the following as the criteria for the items to record in a public-school record system: frequency of items on public-school record forms, items needed for state reports, items needed in order to solve problems in school administration, items actually used by the teacher, and items in the "universal list" which is a result of the ratings of items by 133 judges. Toops (325) listed some hundreds of questions which might be asked of individuals in record forms. He gave principles and rules for the construction of office forms and workable questions. Much emphasis is being placed on making the records cumulative so that teachers may have, to some extent, the benefit of information regarding a pupil which others have accumulated. The problem of what to record, how to record it, and how to evaluate and use the recorded items is still distinctly a research problem.

Definition of Terms

Records are valueless unless objectively collected. The serious lack of common definition of the most frequently occurring terms and units was noted by Phillips (305). Such terms as *school*, *teacher*, *pupil*, *age*, *day of attendance*, and *day of absence* are used so differently that comparison of one school system with another on the basis of such records is fraught with considerable danger. Heck (281, 282) made mention of this lack of definition. Is a *school* a school district, school building, supervisory unit, or a schoolroom? Does the term *teacher* include supervisors, principals, librarians, or janitors? Just who is a *pupil*? In some usages of *absence* a pupil is counted absent or present for the day depending upon his absence or presence during the first ten minutes of the school session of that day. Is a six-year-old child one who has reached his sixth birthday, but not his seventh, or one who has passed his fifth birthday but not his sixth?

Toops (326) calls attention to this need of standardization of definitions and to the possibilities that are opened up when comparison may be made of various school systems, and when studies of the interrelations of the variables are possible. Robertson (311) said that the value of the item recorded increases geometrically as the number of items increases arithmetically. This is true only when one can make use of the interrelations of items.

A number of agencies have taken steps to standardize their terms (246, 247, 248, 264, 267, 268, 269, 270, 285, 289, 296, 319, 321, 328, 329). For example, the International Association of Police has made a serious effort to standardize crime categories and to make possible comparable statistics from police and criminal records; the Child Guidance Clinics, sponsored by the American Mental Hygiene Association, have standardized their record-keeping; delinquency statistics are standardized by the National Probation Association; juvenile labor statistics are standardized

by the Children's Bureau of the U. S. Department of Labor; and statistics of birth, death, and marriage are standardized over a longer period of time by the U. S. Public Health Service in cooperation with vital statisticians, state health bureaus, the American Medical Association, and other agencies, including the life insurance companies which are financially interested in the standardization of such statistics.

Codes

The development of standard codes for recording not only simplifies the matter of making records but also is of material aid in the standardization of terminology. Codes to be used must be able to care for all of the exceptional cases, and still not have too many categories. Heck and Reeder (283), in their system of child accounting, printed codes on the record forms for such variables as reasons for absence, nationality of child, and source of information of age of child. Fowlkes (274), McAllister and Otis (293), and Toops (325, 326) also suggested codes to be used. Toops (325) gave a number of standard codes which could be of considerable value in school record systems for such items as sex, race, father's occupation, church membership, and nativity of parents and pupil. He pointed out the need for a series of single digits to represent the numbers from 0 to 20. He suggested the use of meaningful serial numbers for the positive identification of pupils, to include perhaps name, sex, race, date of birth, and other characteristics which, for a given pupil, remain fixed.

Forms for Recording

A few discussions contain some specifications as to the materials of record forms, with regard to such characteristics as permanence and fileability; these are principally the textbooks on child accounting and record systems. Reavis and Woellner (309) showed what labor saving devices, such as filing systems and mimeographs, can do to increase efficiency in school record keeping. Several complete systems of child accounting records for elementary and secondary schools have been put on the market (298). Stenquist (314) developed a card system of nine 4 by 6 inch cards. There is a separate card for each of several sorts of records. These go with the pupil from the kindergarten to the secondary schools. The system could be improved by making it possible to indicate on each card the total number of cards that are in the packet at any particular time. O'Rear (302) gave an account of the duties of the college registrar and showed samples of various record forms. Most of the studies of special personnel problems include samples of record forms which apparently emphasize the particular items which the writer has been studying.

Evaluation and Utilization of Record Items

Swink (318) and Thisted and Jones (320) attempted the evaluation of personnel items which are commonly collected as part of the entrance

record in colleges. Both studies concluded that such personnel items have little academic predictive value over a general ability test. Chapman and Ashbaugh (262, 263) investigated a number of report cards and recommended a four page form. The question of reporting scores of standard tests to parents was also raised (300). Burr (258) advocated a variable marking period and a reporting on different characteristics at various times.

In the field of records in higher education the tendency is toward emphasis of the record for personnel purposes. The American Council on Education fostered the development of cumulative personnel record forms (311, 332). It was suggested that better records are needed for better articulation of secondary and higher education (259, 260). Toops (325) conceived the best records as being a perpetual inventory of the attainments, aptitudes, ambitions, and interests of the individual pupils.

A summary (280) of the principles of good cumulative records suggests that the record form must show *trends of development* of abilities and interests, must be based on *accurate measures* and *concrete observations*, must provide a means for recording measures and observations in comparable and meaningful terms, wherever such measures are available, but must at the same time provide for convenient recording and clear differentiation of whatever measures, subjective and non-comparable, may be available. The data should appear in a form and order capable of showing their inter-relations. The record should be readable, graphic so far as possible, fairly complete for the large mass of "normal" children (requiring auxiliary cards only for extremely atypical subjects), inexpensively, accurately, and quickly reproducible, and accompanied by a carefully written and amply illustrated manual of directions. It should be administratively convenient, showing all available information on one continuous record form and permitting the collection of further data, by auxiliary cards and otherwise, for current use (in connection with the previous record) and for periodic sifting and entering on the permanent record. Since all officers of the school that have to deal with students would have access to all information that is available on each student, the principal's record and the teacher's should be duplicates.

Heck (281) listed fourteen requisites of a personnel record system. Grover (278) gave a list of the minimal data to go on the cumulative record at various school levels. Hall (279) used records as a means of measuring the educational environment. He assumed that the performance or status of the group gives an index of the individual. Such indices of the group are compounded from the records of individuals.

Conclusions—There is a tendency toward a personnel point of view and a recognition of the need of research. A recent item added to records is "behavior specifics." To use these to best advantage methods of analyzing qualitative data are needed. Further work on technics of constructing profiles is needed. The need for standard codes for recording has been pointed out. Terminology will have to be made more uniform.

CHAPTER FIVE

Characteristics of Pupil Population

THE research literature of education abounds in studies involving measurements of many sorts in variously selected school populations. These include aptitude tests, achievement tests, performance tests, and anthropological measurements of various populations—boys, girls, elementary schools, junior high schools, senior high schools, public and private schools, and colleges. Most of these, however, are studies which involve very restricted populations and are not concerned particularly with norm functions but rather with the co-variation of traits within a selected population.

It is proposed in this chapter to summarize briefly a few of the more outstanding studies of the survey-norm type, those studies which describe the characteristics of certain populations.

High-School Seniors

A number of studies has been made of the abilities and characteristics of high-school seniors. Perhaps the earliest study of this sort is the one by Book (341). He observed that the fifth or tenth percentile intelligence test score of high-school seniors is about the average score of the unselected white draft. He found little difference between the intelligence test scores of those seniors who are going to college and those who do not intend to go. Henmon and Holt (368) at Wisconsin in a similar survey of high-school seniors found a slight advantage in the intelligence of the group intending to go to college. The same is true of studies at Ohio State University by Toops and Edgerton (396) involving 30,000 high-school seniors of Ohio.

Relative to the population more students from the farming, commercial, and executive occupations are seniors in high school and expect to go to college than from the labor and skilled artisan occupations. Book (341) found that the brightest seniors do not come from the wealthiest homes but from families with incomes in the one to two thousand dollar range. Henmon and Holt (368) found no relationship between high-school size and the median intelligence test score. In a few studies a slight relationship between high-school size and median intelligence test score was observed. No significant sex differences were reported in any of the surveys of high-school seniors.

These studies of high-school seniors have shown a rather distinct relationship between intelligence test score and the occupational choice of the pupil. The median intelligence test scores of the pupils who intend to enter occupations which are rated high on the Barr Scale are higher

than the median scores of pupils who have chosen occupations which are rated lower on the Barr Scale. The frequency distribution of occupations chosen does not follow at all closely the proportion of persons engaged in those occupations as listed by the U. S. Census. This is especially true of the occupational choices of girls. Their choices fall mostly into teaching, nursing, and stenographic work.

Comparing the intelligence test performance of 30,000 Ohio high-school seniors with those of college freshmen of various Ohio colleges, Toops and Edgerton (396) found small differences in the distributions for the two groups. Ruch (388) reported a "surprisingly small difference" in the test scores of the Iowa high-school seniors and the University of Iowa freshmen, using the Thorndike Test for high-school seniors and the Ruch High-School Content Examination.

Superior Children

One of the outstanding contributions of the past decade is represented in "Genetic Studies of Genius," a series of reports of studies of superior children carried out under the direction of Terman (343, 346, 394) at Stanford University. The findings of practically all of the other studies of gifted children fit in with the composite portrait of the gifted child as painted by Terman and his co-workers. The findings (343) are briefly summarized as follows:

Gifted children come predominantly from family stocks of decidedly superior intellectual endowment and of slightly superior physical endowment. Intellectually gifted children are as a group slightly superior to unselected children in health and physique and tend to remain so. It is not known whether this superiority is a function of endowment, or better physical care, or both. Superior children as a group are not characterized by intellectual one-sidedness, emotional instability, lack of sociality or social adaptability, or other types of maladjusted personality.

In practically all character and personality traits, gifted children average considerably better than the general school population. In social intelligence ratings, in social interests and play activities, gifted children are either normal or superior. In masculinity or femininity of interests the gifted boy scores about the same as unselected school boys of the same age, while the gifted girls deviate significantly from the norm for girls in the direction of greater masculinity. In those character traits measured by the Raubenheimer-Cady Tests, a gifted child of nine years is on a par with unselected children of thirteen or fourteen years. As rated by teachers, gifted children show their superiority, on the average, most of all in intellectual and volitional qualities and least in physical and social traits. The gifted child has more hobbies than the child of average endowment.

In terms of school progress the gifted child is accelerated by 14 percent of his age. But in actual mastery of school subjects as shown by achieve-

ment tests he is accelerated by more than 40 percent of his age. At the age of ten years there is no correlation between the achievement test scores and the number of years the gifted children have attended school. The gifted boys maintain, or almost maintain, their relative superiority in intelligence at least through the period of adolescence. Girls more often than boys show a drop in the intelligence quotient as adolescence is approached or soon thereafter. School achievement as a rule continues through school and college in a manner to be expected of children of such ability. Subject failures are practically never incurred by these gifted children. More than 90 percent of the boys and more than 80 percent of gifted girls included in the study go to college; most of them remain to graduate. Those who graduate from high grade universities win Phi Beta Kappa or other graduation honors about three times as frequently as do the general run of graduates of such institutions. Hartshorne, May, and Maller (366) found that accelerated children are more cooperative than children of lesser abilities. There is a slight correlation between intelligence and cooperativeness.

Character Studies

Hartshorne, May, and others have added largely to the studies of character and personality. Most of these studies are relational studies of select populations. A few of them are more normative. Hartshorne, May, and Maller (366) showed that girls are slightly more cooperative than boys. There is a slight relationship between occupational status of the family and cooperativeness. Children of native born parents are more cooperative than children of foreign born parents. There are some slight differences of national and religious grouping. The English-Scandinavian groups are more cooperative than the Irish and Scotch. The average cooperativeness score is higher for Protestant than for Jewish children and higher for Jewish children than Catholic children. The sibling resemblance in service tendencies is almost as great as in intelligence or in deceit; there is a correlation in the neighborhood of .40 or .50. "Inhibition and persistence represent certainly a balance of interests and probably also specific abilities or habits of work" (366:450).

The literature on character measurement is well summarized by Watson (401, 402) and by May, Hartshorne, and Welty (380).

Sex and Race Differences

The trend of opinion seems to be that such ability differences as those of sex, race (360), and perhaps even the urban-rural differences in intelligence and school performance, are functions of the test used rather than any real quantitative differences. Shimberg (389) reported that urban pupils are better than rural pupils on information tests scaled on

the urban pupils and conversely that rural pupils make better scores on information tests built for rural pupils. She also suggested that the national differences found should be considered as "differences" rather than differences of the superior-inferior kind. A good bibliography appears in this monograph. Allen (334), in reviewing the literature on sex differences, came to the conclusion that few if any of the so-called sex differences are due solely to sex. Individual differences are often greater than differences determined on the basis of sex. The different social training of the sexes produces different interests and standards. He also pointed out a need for more careful definition of terms.

Eells and Fox (351), in a study of junior-college entrants, found that boys excel girls in mathematics when the factors of high-school preparation and age are equalized and when a study is made of responses to individual items. Lund (377) found that girls excel boys in high-school and college English and in language courses; that boys excel girls in mathematics and sciences. He further found that the scholastic superiority of girls as measured by school marks is almost, if not entirely, eliminated when retests for the same material are given after an interval of time. One can hardly say, then, that girls are superior in educational achievement since on the Carnegie retest their superiority is no longer apparent. Thyen (395), studying a population of 19,000 *Oberrealschule* pupils in Germany, found the same sort of sex differences as did Lund—superiority of girls in languages; superiority of boys in mathematics. He also reported a greater variability of marks for girls than for boys. Goodenough (363) reported similar differences.

Luh and Wu (376) reported a study of the intelligence of Chinese children on Pintner Performance and Binet Tests in Peiping; they concluded that the intelligence of Chinese children is about the same as that of American children. Garth (359, 360), in a review of the literature of race psychology, pointed out that the comparative intelligence of races can be easily accounted for in terms of the influence of nurture and selection.

Garth (360), in his studies of race differences, found no consistent evidence of musical differences. Grandprey (365) found that differences in musical ability are associated with the musicality of the home environment. Mursell (382) summarized recent work in the measurement of musical ability. Farnsworth (353), in an interesting summary of the material on musical abilities, found quite inconsistent and usually small racial and sex differences. In most of these studies either the Seashore or the Kwalwasser Tests were used.

Private-school children showed superiority in intelligence and achievement tests to public-school children in the studies of the Educational Records Bureau (404, 405); however, "it is doubtful that the academic superiority of the independent school pupils is as great as their intellectual superiority warrants."

Mechanical Ability

Of the many studies of mechanical ability, few are of the normative type. The Minnesota study by Paterson and others (385) is perhaps the most extensive and intensive study to date. The mechanical abilities of a junior high-school population were investigated intensively. Norms for a number of mechanical ability tests were given for various age and school grade groups. Stine (391) found only small differences between the performance of the part-time shop course boys and the full time academic pupils. A number of other studies of mechanical ability were made by MacQuarrie (378), Cox (347), Crockett (348), and Toops (399). Through all of these the pioneer work of Stenquist (390) shows.

Physical Growth

The data regarding growth and health are of great interest. The most outstanding of the recent studies are those which have been carried out under the auspices of the American Child Health Association (355, 356, 357, 358) by an analysis of anthropometric data and medical examination to derive measures in the general field of growth, development, and nutrition.

Franzen cautions against the use of height-weight tables in which no allowance is made for skeletal dimension differences. He showed that the chest and hips are more important in the determination of weight than is height. He also developed measures of skeletal symmetry involving height, bisacromonial width, breadth of chest, length of chest and width of hips. He (357:79) summarized the data on growth as follows:

1. Development between $9\frac{1}{2}$ and $10\frac{1}{2}$ is greater than in any other year between $7\frac{1}{2}$ and $12\frac{1}{2}$.
2. The male lag in development comes between $10\frac{1}{2}$ and $12\frac{1}{2}$ in all characteristics.
3. There is a general increase in variability in all years except age $8\frac{1}{2}$ to $9\frac{1}{2}$.
4. The male lag in increase of variability is between $10\frac{1}{2}$ and $12\frac{1}{2}$.
5. Height develops faster than any other trait between $10\frac{1}{2}$ and $12\frac{1}{2}$, whereas the girths develop most slowly. Amount of subcutaneous tissue does not increase at all in this period.
6. Boys exceed girls in chest dimensions in all age groups between 7 and 12 inclusive. Girls exceed boys in width of hips, girth of calf, and amount of subcutaneous tissue in these age groups. In height and shoulders boys exceed girls below 10 and girls exceed boys at 11.
7. With a few minor exceptions the female is more variable than the male in the traits measured between $7\frac{1}{2}$ and $12\frac{1}{2}$, inclusive.

Wellman (403) pointed out the need of an index of maturity. She gave an excellent bibliography of 127 titles. Anderson and Goodenough (337) described physical, mental, and character growth from infancy to puberty. This work was written for parents. Bierring (340) reported a marked relationship of metabolism and body weight for boys seven to eighteen years of age. Franzen (358) summarized the data regarding condition of teeth for public-school children ten, eleven, and twelve years of age.

CHAPTER SIX

Guidance and Counseling

THE past five years have shown remarkable growth in the concept of guidance and in the organization of guidance in public schools. The present review will point out the forces underlying this growth, the major steps in its development, and the chief contributions to the literature of the field.

Forces Involved

The forces responsible for progress in organized guidance include not only associations interested in educational and vocational guidance, but also associations of principals, counselors, deans, attendance officers, and placement workers. Other fields of effort have made very important contributions, such as:

- (1) Research workers engaged in the study of individual differences of intelligence, achievement, special abilities or aptitudes, and personality. Research in this field provides the necessary, objective, personnel records without which counseling becomes crude guesswork.
- (2) Agencies engaged in the social adjustment of young people in connection with problems of school and employment. This is the contribution of the mental hygiene movement to education and guidance.
- (3) Research agencies engaged in the objective measurement of achievement in all of the public school and college subjects. The introduction of such objective data and especially of continuous records of growth, is one of the most important contributions to the guidance movement.
- (4) Agencies and workers engaged in curriculum research for the purpose of making education more practical and better adapted to individual needs.
- (5) Workers engaged in improving methods of individual counseling and in developing group guidance programs. The purpose of these workers is to provide guidance for *all* children, rather than merely for those who are failing, getting into difficulties, or meeting other serious problems which require individual assistance.

The converging of all of these movements upon the schools has brought about very remarkable improvements in guidance organization and service.

Development of Guidance and Counseling Service

The recognition that the schools must provide guidance for *all* pupils, not merely for those who fail or leave school or are handicapped was an important step. To do this on an individual basis is too expensive. Individual guidance, like individual instruction, because of its expense, must be accomplished for the most part by *group work*. The recognition of this fundamental need brought about an evolution which has been described by Reavis (417).

The procedure appears to be somewhat as follows: At first the principal attempted to do all of the guidance work; in the larger schools, this neces-

sarily involved only problem pupils. As schools grew in size the principal called upon the assistant principal, dean, or counselor for assistance. Such guidance, however, was only incidental to administration and dealt only with problem pupils. Next, the principal delegated the guidance functions to home-room teachers; he gave whatever supervision and assistance he was able to provide. This was clearly an attempt to provide guidance for *all children* and constituted an important step in the right direction. It implied, however, that the guidance offered must necessarily be restricted to what unselected and untrained workers could do; this was just the kind that every good teacher has always done and should do as a part of her administrative and instructional duties.

Because every teacher could not reasonably be expected to advise with young people concerning educational and occupational opportunities beyond school, special counselors, attached to a central placement service, have been appointed in many cities and assigned, full-time or part-time, to the various secondary schools. This type of staff service was provided to supplement organized guidance within the school, *but not intended to replace such services*. At best, these counselors were available only for the exit interviews with graduates or drop-outs.

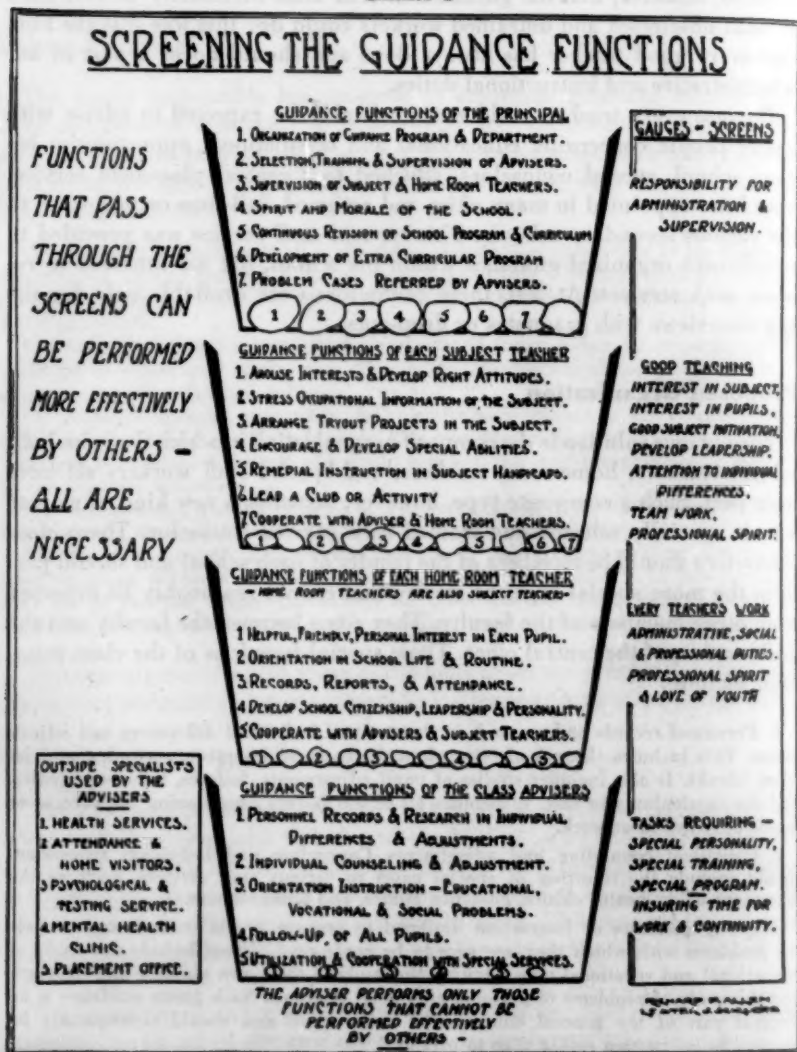
Proposed Organization

The obvious solution is the composite organization in which the principal, subject teachers, home-room teachers, and special staff workers all have their part. Such a composite type, however, demands a new kind of worker who is specially selected and trained as a *general* counselor. These *class counselors* should be members of the faculty of each school and should perform the more special types of service that cannot reasonably be expected from other members of the faculty. They come between the faculty and the staff services of the central office. These special functions of the class counselor include:

1. Personnel records and research in the study of individual differences and adjustments. This includes the use of tests of intelligence, achievement, aptitudes, and interest blanks. It also includes studies of pupil adjustments, failures, follow-up studies, and the curriculum; in fact, it includes all of the factors conditioning the success of pupils at school or at work.
2. Individual counseling and adjustments. Counseling and individual adjustment should include the referring of special cases to various staff services, such as the placement office, health clinics, guidance clinics, and home visitors.
3. Group guidance or instruction designed to prepare pupils to meet more wisely the problems with which they are sure to be confronted. These include the study of educational and vocational opportunities, the study of their own abilities and interests, and the study of problems of personal and social relations. Such group guidance is an integral part of the general education of every child and should consequently be charged to instruction rather than to overhead.

Chart I pictures the process by which a differentiation is made between the general guidance functions of the principal, subject teachers, and home-room teachers. The special guidance functions of the class counselor and the still more specialized functions of the staff services are also indicated. This functional differentiation has taken the place of the more logical grouping of guidance functions, such as vocational guidance, health guidance, social guidance, and recreational guidance. Guidance has thus become a *unitary*

CHART I



function; and the total guidance task of the school has been delegated among the faculty so that each person is responsible for performing only the functions for which he is trained and which are closely connected with his major functions as an administrator, instructor, or specialist.

The class counselor, however, is not in any sense a narrow specialist; he is rather a generalist who takes the place of the principal in a large school for the purpose of getting a picture of the whole child from the reports of the various subject specialists. The principal of a large school can no longer perform this service. Without some generalist to take his place, pupils will be abandoned to the one-sided guidance of subject specialists. Thus the counselor is more like the general practitioner in the field of medicine, while the special staff services are similar to the more highly specialized medical service.

The Literature of the Field

During the past five years, the following literature is significant.

The reports of the Cooperative Test Service, the Pennsylvania study, and the Educational Records Bureau, under the leadership of Dr. Ben D. Wood and Mrs. Eleanor Perry Wood, have made important contributions to the field of personnel records and research by providing comparable tests through which individual records of growth may be assured.

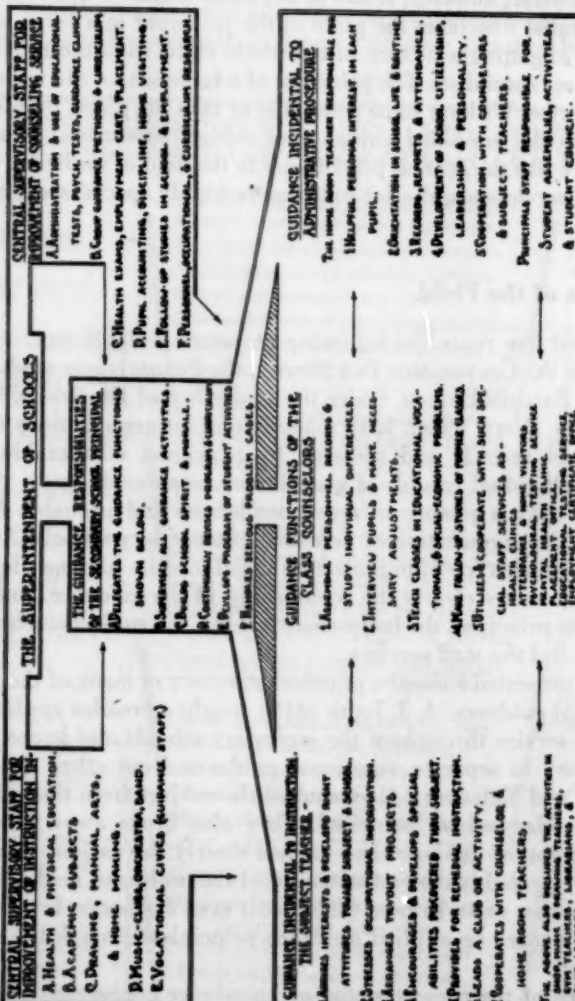
Reavis (417) gave a picture of recent tendencies and probable future developments in the organization of guidance in secondary schools. A summary of the composite type of organization mentioned by him may be seen in Chart II which shows clearly the relationship of the guidance functions performed by the principal, the home-room teacher, the subject teacher, the class counselor, and the staff services.

Myers (416) presented a simple, practical summary of many of the problems of vocational guidance. A. J. Jones (412) sought a broader application of the guidance service throughout the secondary schools and broke away from the tendency to separate vocational guidance from other guidance problems. Koos and Kefauver (415) studied the subject from the point of view of the secondary-school principal. They also broke away from the narrower conception of guidance and defined clearly the various guidance objectives, giving probably the best statement of the problems, methods, and practices as they now exist. Brewer (408) went even further in broadening the basis for guidance; he applied guidance principles through the entire field of education.

The summaries of the present status of knowledge concerning interests and aptitudes by Fryer (410) and Hull (411) provide important contributions to guidance literature. Dearborn (409) explained clearly the possibilities and limitations of the use of intelligence tests in the guidance and adjustment of children. Kitson (414) focused attention upon the guidance process as it relates to an individual and brought us back to the funda-

CHART II

ORGANIZATION OF GUIDANCE IN A SECONDARY SCHOOL



REVISED, 1940
 BY J. C. GORDON

mental assumption that guidance is not an act but a process, life-long in extent, which requires special services in critical periods. W. B. Jones (413) and others provided units in a course for the training of guidance workers.

In listing the literature in the field of guidance, special emphasis should be placed upon the articles in the *Vocational Guidance Magazine* (418) as well as in publications in the field of secondary education. These articles, however, are too numerous to mention with the exception of the series on the functions and organization of guidance in the various school units which appeared in the *Vocational Guidance Magazine* in 1929 and 1930. These were designed to be of special help to those responsible for the organization and administration of guidance in each of these units. They include reports on the functions and organization of guidance in the elementary schools, the junior high schools, the senior high schools, the continuation schools, the evening schools, the placement office, the vocational schools, and in adult education.

The past five years have also emphasized a growing realization of the importance of guidance in adult life. Such guidance begins at the point where children leave the full-time schools, namely in the day continuation schools, the evening schools, and the vocational schools, and extends through the entire field of adult education and adjustment. It is probable that the next five years will show important developments in this field.

A committee of the college teachers of guidance is now at work on the development of a group guidance curriculum in the senior high school. This should be available in 1933.

Although an exhaustive bibliography of research may be of assistance to individual research workers, it is often confusing to the persons who should benefit most as a result of research, namely those who must put the findings into practice. In order to serve this latter group, the present report has attempted to summarize tendencies and growth and has mentioned only the most important contributions. Each of the books mentioned lists many other references. These, with the *Vocational Guidance Magazine* (418) and the White House Conference report (419) present a wealth of supplementary information.

Follow-up Studies

An increasing number of school systems have been carrying on as part of the duties of the counselor, in connection with personnel records and research, follow-up studies of the graduates of the schools. Usually these follow-up studies are made at the end of one, three, or five years for the senior high school and one, two, and three years for the junior high school. Chart III summarizes the procedure, the facts discovered, and the ways in which these facts are used. Such periodical studies, made by the class counselor, become a continuous survey of the destinations and adjustments of pupils during the years immediately following their life in the school. Such surveys are an important element in the improvement of counseling

CHART III

THE CONTINUOUS FOLLOW-UP SURVEY OF SENIOR HIGH SCHOOL GRADUATES

I. THE PROSEUDRE

	12 YEAR PERIOD OF ONE COUNSELOR											
	1	2	3	4	5	6	7	8	9	10	11	12
Class No. 1	IN SCHOOL			①	②	③						
Class No. 2				IN SCHOOL		④	⑤	⑥				
Class No. 3						IN SCHOOL		⑦	⑧	⑨		
Class No. 4								IN SCHOOL				

NOTE - That after a Class is Graduated a ①, ②, ③ Year Follow-Up Study is Made.
That the Counselor has but one Follow-Up Study each Year

II. THE FACTS DISCOVERED

THE HIGH SCHOOL GRADUATES

AFTER 1 YEAR AND BEFORE 1 OF 2 YEARS

FURTHER FULL TIME EDUCATION IN -

1. GENERAL COLLEGES.
2. ENGINEERING & TECHNICAL SCHOOLS
3. PRE-PROFESSIONAL OR JR. COLLEGE.
4. PROFESSIONAL SCHOOLS.
5. TEACHERS' COLLEGES.
6. BUSINESS COLLEGES.
7. POST GRADUATE & OTHERS

FULL TIME OR PART TIME EMPLOYMENT IN

1. INDUSTRIAL & MECHANICAL FIELD.
2. COMMERCIAL, CLERICAL & SALES.
3. PUBLIC OR PROFESSIONAL SERVICE.
4. TRANSPORTATION FIELD
5. DOMESTIC & PERSONAL SERVICE.
6. APPRENTICESHIP SERVICE.
7. CO-OPERATIVE COURSES.
8. EVENING VOCATIONAL COURSES.

AFTER 2 OR 3 YEARS AND BEFORE 1 OF 2 YEARS

REGULAR PROGRESS -

- GRADUATES
- PROFESSIONAL SCHOOLS
- OCCUPATIONS
- FURTHER TRYOUTS
- OTHER REASONS
- SUGGESTIONS REGARDING SCHOOL PROGRAM

IRREGULAR PROGRESS -

- LEFT COLLEGE BECAUSE OF:
- HEALTH
- FINANCES
- FAILURES
- MARRIAGES
- CHANGES OF OBJECTIVE
- OTHER REASONS
- PROGRAM SUGGESTIONS

AFTER 3 OR 4 YEARS AND BEFORE 1 OF 2 YEARS

REGULAR PROGRESS -

- PROMOTIONS
- BETTER POSITIONS.
- INCREASED EARNINGS.
- FURTHER TRAINING
- SUGGESTIONS REGARDING SCHOOL PROGRAM

IRREGULAR PROGRESS -

- CHANGES OF EMPLOYMENT.
- CHANGES OF OCCUPATION
- POOR EARNINGS
- TRYOUT EXPERIENCES.
- TRAINING NEEDED
- SUGGESTIONS REGARDING SCHOOL PROGRAM

III. THE USE OF THESE FACTS

COUNSELORS FOLLOW EACH PUPIL THROUGH FOR 8 YEARS. THIS INCREASES THE EFFECTIVENESS OF THE SURVEY

1. IN ORIENTATION COURSES FOR SUCCEEDING CLASSES.
 - LIST OF COLLEGES & OPPORTUNITIES OFFERED.
 - LIST OF OCCUPATIONAL OPPORTUNITIES & EMPLOYERS.
 - KNOWLEDGE OF WAGE CONDITIONS.
 - KNOWLEDGE OF OCCUPATIONAL SUPPLY & DEMAND.
 - OTHER EDUCATIONAL OPPORTUNITIES.
2. IN CURRICULUM RESEARCH & REVISION.
 - CAUSES OF FAILURES IN EDUCATION & EMPLOYMENT.
 - EFFECTIVENESS OF TRYOUTS & TRAINING.
 - OCCUPATIONAL OPPORTUNITIES & TRAINING REQUIRED
3. IN PLACEMENT & COUNSELING.
 - FILE OF USERS OF SCHOOL PRODUCT.
 - RECORDS OF EMPLOYERS & PUPILS.
 - UNADJUSTED GRADUATES.

BOTH STUDENTS & COUNSELOR ARE BENEFITTED BY A KNOWLEDGE OF THE EXPERIENCES OF PREVIOUS CLASSES.

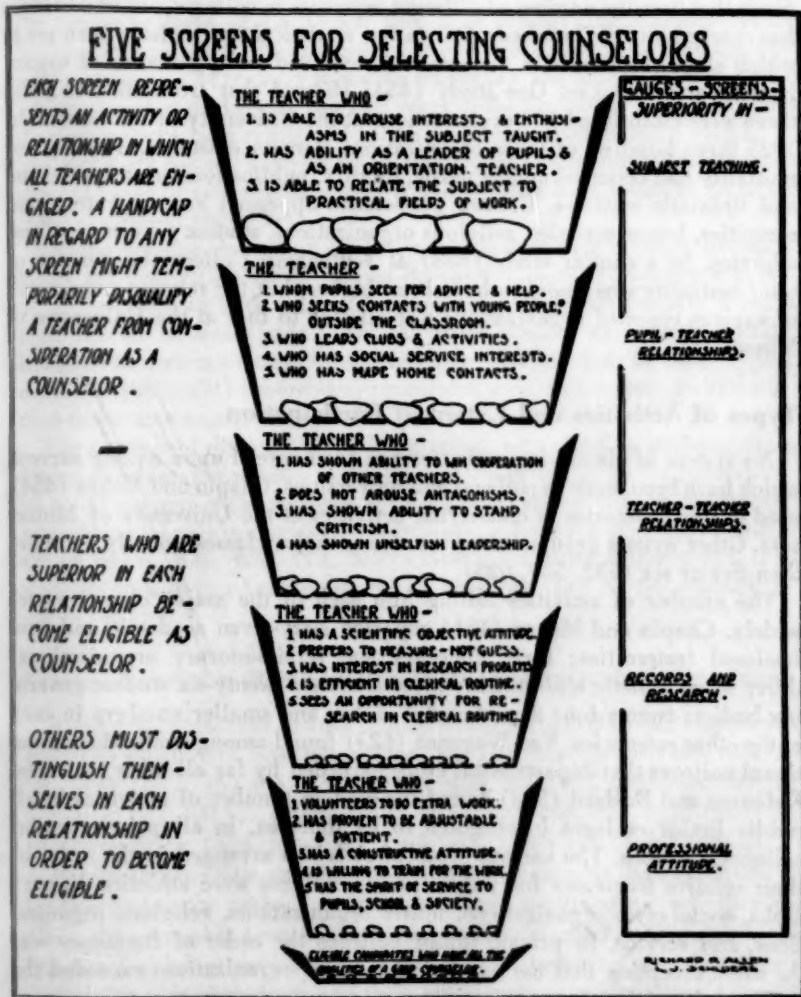
REMARKS BY COUNSELOR

and should be required of every counselor. When these surveys are centralized in this manner they are neither expensive nor burdensome. During the past six years more than ninety of these surveys by individual counselors have been completed in Providence, Rhode Island, and mimeographed for the use of all counselors.

Qualifications of the Counselor

Usually these are academic qualifications. Chart IV presents a different basis for selection. It proposes a system of try-outs so that candidates may be observed and rated in regard to their actual performances in comparison with the performances of other possible candidates. Such a scheme has many advantages over the usual subjective basis.

CHART IV



CHAPTER SEVEN

Extra-Curriculum Activities

ACTIVITIES IN COLLEGES AND UNIVERSITIES

History

The origin of extra-curriculum activities in America is usually assigned to the establishment of the first literary society of Yale University in 1753. Since that time the number of different activities in colleges and universities has reached into the hundreds. Only a few statistical studies have been made which show the trends in the establishment and disappearance of organizations and activities. One study (454) showed that from 1887 to 1925 there were established 533 organizations at the University of Minnesota. In 1925 three hundred of these organizations were in existence. The highest mortality had occurred among music, literary, publications, oratory, debate, and dramatic societies. Greater persistence appeared among fraternities, sororities, honor societies, religious organizations, student government, and athletics. In a similar study (558) at Wittenberg College the percent of total mortality was found to have been higher, but the relative persistence of various types of organizations was similar to that at the University of Minnesota.

Types of Activities and Extent of Participation

No system of classifying activities has been agreed upon among surveys which have been made in colleges and universities. Chapin and Mehus (454) used twelve categories in classifying activities at the University of Minnesota. Other writers grouped them into fewer major classes, usually not more than five or six (532, 537, 623).

The number of activities falling into each of the major classes varies widely. Chapin and Mehus (454) reported sixty-seven academic and professional fraternities; forty honorary and semi-honorary organizations; thirty-seven athletic and military organizations; twenty-six student governing bodies; twenty-four departmental clubs; and smaller numbers in each of the other categories. Van Wagenen (623) found among twelve denominational colleges that departmental clubs exceeded by far all other activities. Kefauver and Bullard (532) found the median number of activities in all public junior colleges investigated to be fourteen, in all private junior colleges, nineteen. The various types of activities arranged in the order of their relative frequency for public junior colleges were athletics, literary clubs, social-civic organizations, music organizations, religious organizations, and service. In private junior colleges the order of frequency was the same excepting that the number of musical organizations exceeded the number of social-civic organizations.

Participation in activities has been investigated to find (a) the percent of students who participate (437, 478, 500, 564, 573, 587); (b) the effect of self-support upon participation (622); (c) the time devoted to activities (422, 437, 454, 587); and (d) the number of activities in which students engage (424, 454, 478, 500, 587).

Among representative liberal arts colleges the percent of students who participate in no activities ranges from 4 to 23; the percent of non-participation in the median institution is 10 (587). In all types of junior colleges in California the percent of non-participation is 26.4 (478). It has also been found that the percent of non-participation is less among students in the junior colleges of California than it is among students who register in the state university during their first two years; but for graduates from junior colleges who transfer to a state university, the percent of non-participation is higher during the last two years in the university than it is among those who have been registered in the university continuously (500). The effect of work for self-support upon the percent of students participating in various types of activities in a state university has been found to be practically negligible (622).

On the average, men students in typical liberal arts colleges devote 6.5 hours per week to activities, women devote 3.8 hours. The average number of hours given by both men and women increases continuously from the freshman to the senior year (587). Athletics, oratory and debate, and publications receive more time from university students than do other types of activities (437, 454); moreover, prominent men and women on the whole give more time to activities than do honor men and women (454).

The number of different activities in which participating students engage varies considerably among institutions. Data indicate that approximately 25 to 33 percent of the students enrolled in a typical college or university participate in only one activity while approximately 2.5 percent engage in six or more (424, 454, 478, 587). Both prominent students and honor students engage in a larger number of activities than do the students as a whole (454).

Factors Related to Participation in Extra-Curriculum Activities

Among the numerous factors related to participation in extra-curriculum activities which have been investigated are (a) intelligence (433, 457, 508, 547, 569, 605); (b) scholarship (451, 455, 460, 466, 481, 483, 499, 512, 513, 518, 537, 631); (c) success in later life (446, 498, 579, 619, 628); (d) personality (564); (e) age (503, 517); and (f) health (455).

Intelligence—There are considerable data to support the conclusion that leaders and more active participants in extra-curriculum activities rank above the average in general intelligence (455, 547, 569, 605). On the other hand, a few investigators have found no significant relationship between the intelligence of students and their participation in activities (433, 508).

Among a group of selected students in eastern colleges, participants in football and baseball were rated lower in intelligence than were members of the staffs of daily papers and of debating teams (499).

Scholarship—Chapin (455) and Shuttleworth (603) concluded that students who are the most active in participation in extra-curriculum affairs also stand highest in their academic work. Several studies support the general conclusion that extra-curriculum activities, except in cases of extreme participation, are not a detriment to class work but appear to be favorably related to it (451, 460, 466, 481, 537, 545, 626, 635). There is, however, no conclusive evidence that athletics affect the scholastic achievement of students either favorably or unfavorably (432, 512, 513, 518, 601, 631). With reference to membership in fraternities, Eurich (481) found that, taking student groups as a whole, there is no essential difference between the academic performance of fraternity and non-fraternity members. Honor scholars are frequently characterized by their fellows as academic grinds who do not get into campus activities. Ewart (483) found, however, that a noteworthy percent of Phi Beta Kappa graduates from Colgate were prominent in campus activities and in positions of leadership. A study (569) of juniors and seniors at Vassar shows further that Phi Beta Kappa students are more active than the average juniors or seniors.

Success in later life—The question of the relation of participation in extra-curriculum activities in college to success in later life has been approached from several angles. One study (628) of several hundred eminent engineers shows that 32 percent were participants in athletics, 53.5 percent in literary or scientific societies, and 51.4 percent in social affairs in college. Gambrill (498) found, among graduates from teachers colleges 12.5 years after their graduation, no significant correlation between either extra-curriculum achievement or scholarship and income. In an analysis of the relationship between the winning of a college letter and success in later life, as indicated by rank in the army among graduates from West Point between the years 1891 and 1905, Poffenberger (579) found that "an athlete has the same expectancy of success and no more than any other man in his class." Among Bell Telephone employees the percent of those ranked at the upper salary levels was higher for men who had received campus recognition for participation in activities in college than it was for those with no campus achievement (446). Graduates from Wesleyan University who appear in *Who's Who in America, 1926-1927*, were active as students on the campus (619). Ministers and lawyers were found to have been more active than other professional or business groups.

Other factors related to participation—Moffett (564) found a correlation of .59 between rank in personality given by faculty members and extent of participation in activities among a group of students in teachers colleges. Younger students compared with a control group have been found to excel both in numbers participating in activities and in the average number of activities in which they engage (503). Husband (517) disagreed with this

conclusion but did not support his contention with adequate data. Chapin (455) found a positive relationship between health and participation in activities but the correlation is not statistically significant.

Evaluation of Extra-Curriculum Activities

Few studies of an objective character have been made to determine the values of extra-curriculum activities. It has been generally assumed that participation in activities is contributory to the achievement of the larger objectives of education. This assumption has not been verified. A few studies which have summarized the judgments of alumni and of students regarding the value of activities are not conclusive in their findings (445, 529). At least one study attempted to determine the extent to which participation in activities in college carries over into life after college (423).

Student judgments—The rank of college activities in the order of their relative importance given by students at Syracuse University is as follows: daily social contacts, fraternity life, contacts with instructors, religious activities, musical activities, athletics, departmental clubs, school publications, literary and debating clubs, and social functions (529). Deam and others (470) indicated that, in general, graduate students attach more value to the social and leisure time objectives of activities than to the health and vocational objectives.

Alumni judgments—Among a group of 192 successful alumni of Purdue University, 55.6 percent attached great or very great value to participation, 35 percent attributed perceptible value, while only 9.4 percent considered participation to be of negligible value or to be detrimental (445). Angell (423) found a fairly large carry-over from university to later life in activities involving public speaking or public appearance, fraternities or sororities, religion, social service, and athletics. In music, publications, and student government, the carry-over was not large.

Administrative Organization and Control of Extra-Curriculum Activities

So many different methods are being employed in organizing and administering extra-curriculum activities that it is impossible to describe each plan. The most that can be done within the compass of this report is to summarize surveys of procedures.

Control of participation—In 1915 Brooks (447) investigated the extent to which the point system was being used in forty-nine institutions to limit the outside activities of college students. He found that the system was generally employed in colleges for women, infrequently in co-educational institutions, and not at all in colleges for men. A later and more extensive study showed that of 432 colleges, 151 employed some form of control of participation. The systems of control varied but usually consisted in the employment of point systems (580). Most of the institutions included in the survey

reported in *The Liberal Arts College* (587) exercise some form of control over participation. The agencies of control vary. In the 151 colleges investigated by Pollard (580), student control was employed in 69, faculty control in 53, and combined faculty-student control in 29. Among thirty-five liberal arts colleges only four vested control in student organizations; in all the others, control was exercised by administrative officers or faculty committees (587).

Stimulating participation—The percent of students who participate in no activities, as shown in another section of this review, suggests the desirability of using measures to stimulate participation. Most colleges have apparently given little consideration to this phase of extra-curriculum affairs but have been content with limiting participation on the part of students who tend to become burdened with activities. Reeves and others (587) reported twelve methods of stimulating participation which were found in use among the thirty-five colleges included in the survey. Allowing credit for participation appears to be one of the common practices (426, 623).

Finances—Among junior colleges and teachers colleges Chadwick (453) and Strum (608) found that finances for the support of athletics are derived from student athletic fees, gate receipts, and special appropriations. A number of institutions have provisions for regular financial reports from student organizations and for the auditing of student accounts. Typical reports giving detailed information regarding the finances of each organization are given by the auditors of student accounts at Purdue University (441) and Ohio State University (572).

Student Participation in Government in Colleges and Universities

Philosophical discussions of the theory and functions of student participation in government abound in educational literature. Studies of a research type are few in number and limited in value. The first attempts at self-government by students were made in 1868 at the University of Illinois (620). Since then the idea has been accepted in many institutions and has been adopted in a variety of forms. Studies of a number of colleges recently reported show that some form of student government is common (477, 487, 587). A study of student government in fifty-five colleges shows that eight distinct names are used by the governing organizations. The funds collected for the support of organizations and activities are usually administered by a budget committee of the self-government organization (554).

Criticisms and evaluations of student government in college, largely subjective, suggest that absolute self-government by students is limited in its effectiveness; student-faculty cooperation is generally considered best (420, 477, 554, 587, 629). A survey of the land-grant colleges presented the conclusion that self-governing organizations among women are generally more effective than are similar organizations among men or among combined groups of men and women (536).

ACTIVITIES IN ELEMENTARY AND HIGH SCHOOLS

History

The origin and early development of extra-curriculum activities in the secondary schools of America have been reported by Grizzell (504, 505) and Brown (449). Activities were found in the academies as early as the last quarter of the eighteenth century and in the high schools about the middle of the nineteenth century. Grizzell (504) reported the development of student government, debating clubs, dramatic organizations, social service and charity activities, publications, and athletics from 1852 to 1863 in the high schools of Boston, Hartford, Worcester, Philadelphia, and Portland.

Classification of Activities

Little agreement is found among writers concerning the classification of activities. Koos (538) employed seventeen categories when reporting the activities mentioned by twenty writers on extra-curriculum activities. Terry (618), in contrast, employed only five groups in his discussion of the supervision of activities. The number of categories used by several other investigators are Belting (435), seventeen; Borgeson (442, 443), twelve; the North Central Association (470), eleven; Millard (562), nine; Deam and Bear (471), eight; Rohrbach (595), eight; Reeves (586), six; and Jordan (528), six.

Classifications that are very similar to the one reported by Dement (473) are now being employed by many investigators. These include (a) student-government activities, (b) moral and semi-religious organizations, (c) athletics, (d) publications, (e) dramatics, (f) debating, (g) musical organizations, (h) social and recreational activities, (i) scholarship and honorary organizations, (j) subject or departmental clubs, and (k) organizations formed around the hobbies or special interests of pupils.

Number and Frequency of Activities

Studies have indicated that the number of pupils enrolled in a school usually, but not always, influences the number of activities provided. In a survey of activities in junior high schools, Terry (613) reported that, in schools of less than five hundred pupils, the average number of activities per school was eleven; in schools enrolling from five hundred to one thousand, the average was fifteen; and in schools of over one thousand pupils, the average was eighteen activities per school. Dement (473) and Johnson (524), however, found very little relation between the size of enrolment and the number of activities provided. The number of activities per school reported in several other surveys ranges from no activities to fifty-one, the average being close to six or seven (443, 472, 484, 520).

Studies of the activities most frequently sponsored by schools indicate that athletics, musical activities, dramatics, and literary societies are to be

found in practically all schools. These studies were reported by Terry (611, 613), Belting (435), Black (440), Borgeson (443), Dee (472), McClintock (546), and others (484). Ederle (476) found that subject and special interest clubs and student government activities were sponsored very frequently in addition to the activities mentioned above. Morley (566) and Brammell (444) reported that, among the athletic activities only, basketball, football, track, baseball, tennis, golf, and swimming were, in the order of mention, most frequently sponsored by large groups of high schools.

The activities assume a different rank, however, when listed according to the number of pupils participating in them. Dement (473) found that 40 percent of the pupils participating were engaged in welfare activities; 33 percent in athletics; 18 percent in subject and special interest clubs; 12 percent in musical activities; 7 percent in dramatics; and 5 percent in publications.

Extent of Participation

The extent of pupil participation in extra-curriculum activities has been reported in three manners: percent of all pupils enrolled that are engaged in activities, the number of activities in which pupils participate, and the amount of time devoted to activities. The investigations show wide variations in all three factors.

A review of the studies reporting the number of pupils engaged in activities indicates that from 47 to 95 percent of all the pupils enrolled in schools participate. The number of activities in which pupils participate varies from only one to over five, with averages usually of two or three per pupil (428, 440, 473, 526, 614, 621, 634).

Participation in inter-scholastic and intra-mural athletic activities usually is smaller than in non-athletic activities as shown by Morley (567), Rohrbach (595), and Norton (570). Brammell (444), however, found that in a few schools as many as 75 percent of the boys and girls were practicing for, and participating in intra-mural contests.

Cook and Goodrich (461) reported that a group of 318 boys in a senior high school devoted about one hour a week to activities, while a group of 441 girls devoted about forty-nine minutes. Rohrbach (595) reported a median of from sixty-five to eighty-three minutes per week devoted to activities by a large group of pupils. Osterberg (574) found that 1,235 pupils in one high school spent, on the average, about one and one-half hours per week in club activities sponsored by the school, and that 803 pupils in the same school spent about three hours per week in activities sponsored by agencies outside the school.

Factors Related to Participation

Numerous studies dealing with the values of participation in extra-curriculum activities have shown that certain factors such as intelligence,

scholarship performance, social status of the family, sex, and grade are more or less definitely associated with participation. These studies, for the most part, have simply indicated an association between the factors and participation; no definite cause-and-effect relation has been established, except that extreme degrees of participation appear to have a detrimental effect on the scholarship performance of those participating. Scientific studies in which attempts have been made to establish and measure cause-and-effect relations are very few. Strang (606) found that participation in activities apparently did not increase the knowledge of social usages of those pupils who participated. Similarly, Mayberry (557) reported that participation in student government activities had very little influence upon the conduct and habits in citizenship of a group of participants.

Intelligence—Studies have indicated that pupils who are very active in extra-curriculum work usually excel in mental capacity those who do not participate or who participate in only a few activities. This tendency was found by Hayes (510) in a case study of two hundred pupils, by Swanson (609) when measuring mental capacity by scores on the Army Alpha Test, and by Monroe (565) when measuring mental capacity in terms of intelligence quotients.

Scholarship—Swanson (609), Monroe (565), Osterberg (574), and Millard (562) found that, up to certain limits, there appears to be no harmful effect on scholarship performance of energetic and extensive participation in extra-curriculum activities. The first two studies showed this very conclusively when, in addition to comparing the scholastic records of participants with non-participants, the scholastic performance of participants during periods of participation was compared with the performance of the same pupils during periods of non-participation.

Scholarship and athletics—The effect of participation in athletic activities has been given special study by a number of investigators. One of the best treatments of the problem is a report by Jacobsen (522) in which seventeen studies, most of them appearing within the last ten years, are described and summarized. From an analysis of these studies, Jacobsen concluded that: (a) high-school athletes are of average mental ability; (b) athletes stand as high as, if not slightly higher than, non-athletes in academic achievement as measured by school marks; and (c) the scholarship of athletes does not seem to suffer appreciably during periods of participation.

Leadership—Four general conclusions have been indicated by the studies dealing with pupils holding positions of leadership in extra-curriculum activities: (a) pupil-officers usually are selected from the upper grades of the schools; (b) office holders are superior to members of organizations in the following characteristics—intelligence, scholastic performance, home background, and physical development; (c) harmful results do not necessarily result from the holding of more than one office, although excessive office-holding appears to affect the scholastic performance of pupils; and (d) careful supervision is needed to prevent a small group of very ener-

getic, bright, and capable students from usurping a large percent of the positions of leadership available in extra-curriculum programs (434, 438, 452, 526, 543, 595, 609).

Other factors—In addition to the factors listed, sex, grade in school, outside employment, contact with activities before entering high school, and occupational status of the family bear relations to the extent of pupil participation (428, 473, 510, 520, 577, 604, 614, 621, 634).

Evaluation

Koos (539) listed five methods for the evaluation of extra-curriculum activities: (a) the opinions of those involved in the administration of programs of activities; (b) the opinions of pupils participating in activities; (c) the nature and extent of participation; (d) the effect of participation on scholarship; and (e) evaluation in the light of the extent to which activities achieve the purposes for which they have been established. In a few studies an attempt has been made to measure the extent to which participation in activities in elementary and high schools influences the college and adult life of participants.

As an example of the first method of evaluation, an analysis of literature by Koos (538) indicated that the values most frequently ascribed to participation in activities are training in some civic-social-moral relationships, socializing influences, and training for leadership. Studies by Rugg (596) and Jerrel (523) illustrate the second method of evaluation in listing the opinions of pupils participating in activities. The students believe that participation promotes worthy citizenship, is an aid to discipline, promotes school work and school spirit, and develops responsibility and a respect for law and order. Numerous studies have already been presented dealing with the extent of participation and the influence of participation on scholarship; no studies of a scientific nature were found illustrating the fifth method of evaluation. Studies by Peck (576) and Shannon (602), employing the last named method of evaluation, indicate that very little value can be ascribed to participation when judged on the basis of the influence on behavior in adult life. Shannon concluded that "whatever it is that is necessary for success in the high school is not the factor that is requisite for success in life. . . . Whatever is required to excel in extra-curricular life of the high school seems to be the same thing that contributes to success later."

Administration of Activities

The administration and supervision of activities have formed the subjects of the greatest proportion of articles in the general literature. Of these treatments, the majority are either of a descriptive nature or are discussions of principles of organizations and supervision and of the results that may be expected from the application of these principles. These descriptions may be found by reference to any of the bibliographies on extra-curriculum activities. The studies reviewed in the present report deal only with the

extent to which desirable practices are found in schools. Analyzing the studies dealing with the problems most frequently reported in the administration of activities, Rugg (597), Millard (562), and McClintock (546) indicated that securing financial support, securing adequate sponsors, stimulating participation of some pupils, and regulating participation of other pupils appear to be the four most serious problems.

Finances—Large sums of money are involved each year in the programs of activities. Dement (473) and McKown and Horner (551) reported that per pupil costs range from less than \$1 in a very few schools to over \$27 per pupil in other schools. Terry (611) found that the median income from activities was between \$1,100 and \$1,500 annually and that receipts amounting to as much as \$78,000 were reported by one school.

Kirklin (535), Dement (473), and Brammell (444), and the study reported in the *American Educational Digest* (484) indicated that extra-curriculum activities are largely self-supporting. Student fees and dues, gate receipts and sales of tickets for programs, and the sales of publications and advertisements form the sources of income in most cases. The board of education furnishes financial support for activities in a few cases, especially in the junior high schools. Studies indicate that, for the most part, the financial accounts of the activities are in the hands of pupil treasurers; but that general supervision is held over the treasurers by the principal of the school, the principal's secretary, the school treasurer, a faculty member or committee, or by the clerk or secretary of the board of education (476, 534, 611, 633). The problem of desirable practices in financing extra-curriculum activities and of accounting for funds has given rise to a number of descriptions of practices that have proved successful in practical situations. The accounts by Babson (429), Bacon (430), Engelhardt and Grill (479), Jones (526), May (556), and Meyer and Eddleman (559) are especially good.

Sponsors—Studies indicate that very often teachers who are sponsoring activities are not as well prepared or trained for their work as would be desirable (421, 431, 501). A study by Terry (612) indicated, however, that about three-fourths of the sponsors in eight schools felt that they were well prepared, either through experience or training, for their duties. Sponsors receive recognition for their work in three manners: (a) through the yearly ratings of teachers by principals; (b) through additional financial compensation (usually given to sponsors of athletics and of musical and publication activities); and (c) through the reduction in classroom or other teacher duties (555, 611, 613). Wise and Roemer (633) found that sponsoring activities was considered a part of the teachers' duties.

Stimulating participation—Pupils are encouraged to participate in activities through (a) granting awards and credits, (b) requiring all pupils to participate, and (c) correlating the work of activities with classroom work in the regular curriculum. The first method appears to be coming into wide

use (440, 468, 476, 586, 633). When credit is granted, it is usually given for participation in musical activities, athletics, debating, publications, and dramatics. The amount of credit granted varies from one-fourth to one unit out of the sixteen or seventeen units usually required for graduation from high school (440, 468, 472, 476, 525, 527, 534, 546, 586). According to studies by McClintock (546), Wise and Roemer (633), and Terry (613), the second method is not used as generally as is the first. In an increasing number of schools the activities are being correlated with the work of the regular classroom. This practice is found among the publications, intramural athletics, debating, and dramatic activities (444, 502, 506).

Limiting participation—Six general practices are reported most frequently for limiting participation:

(a) Pupils are limited on the basis of point scale systems; (b) activities are grouped into major and minor activities on the basis of the amount of time and the responsibility connected with participation and pupils are restricted from participating in more than a definite number of activities in each group; (c) pupils are limited in their participation on the basis of their scholarship performance (pupils with high scholastic averages being permitted greater participation than those with low averages); (d) pupils are limited according to their grade in school (pupils in the eleventh and twelfth grades being permitted wider participation than those in the lower grades); (e) pupils are limited simply in the number of activities in which they may participate; (f) the schedules for the meetings of activities are so arranged that it is impossible for pupils to participate in more than a limited number of activities.

The following studies indicate that methods (a) and (c) are employed more frequently than any of the others: Johnston (525), Ederle (476), Black (440), Terry (611, 613), Jones (527), Wise and Roemer (633), and Masters (555).

Bibliographies

Several textbooks have appeared within the last few years dealing with problems of extra-curriculum activities. Some of the most important of these are by Borgeson (442, 443), Deam and Bear (471), Foster (486), Fretwell (489), Jordan (528), McKown (550, 552), Meyer (560, 561), Millard (562), Pound (582), Roberts and Draper (590), Roemer and Allen (592, 593), Terry (613, 618), and Wilds (632). The following books deal with specific types of activities: Evans and Hallman (482), home-rooms; LeCompte (542), dramatics; MacDonald (548), class organizations; Vineyard and Poole (624), student government; and Wells and McCalister (630), student publications. Excellent bibliographies in the field have been prepared by Cowley (464); Deam and others (470); Odell and Blough (571); Roberts and Draper (590); Roemer and Allen (592); Taylor (610); Terry (615, 616, 617); and Wise and Roemer (633). Bibliographies on special types of activities have been prepared by Fretwell (490, 491, 492, 493, 494, 495).

STUDENT PARTICIPATION IN GOVERNMENT IN HIGH SCHOOLS

Many investigators have treated student participation in administration and government as a form of extra-curriculum activity and have not made a separate detailed analysis of it. A few, however, have studied student participation more intensively. A comparison of investigations shows a growth in the number of high schools making some provision for pupil participation in government. The most recent studies indicate that approximately two-thirds of the high schools have some plan for pupil participation in government (425, 474, 475, 589, 598, 600, 625).

Most generally a student council is responsible for the functions of government in which students participate, although other names are given to the governing bodies in some schools (474, 475, 598, 625). Members of the council or governing body are usually elected either by classes, by the home-rooms, or by the student body as a whole. The number of members ranges from four to one hundred and thirty-five (425, 474, 509, 589, 598). Scholastic qualifications or approval by the principal, or both, are most frequently specified as prerequisite to membership (425, 474, 598). The governing bodies meet daily in some schools and only on call in others. Most generally the meetings are held semi-weekly, weekly, or bi-weekly (474, 589, 598). Meetings of the organizations are usually held during school hours (589).

Investigations of the functions performed by student governing bodies show that most frequently they participate in the management of student organizations and extra-curriculum activities and in the general administrative activities relating to order in corridors, cloak rooms, and study halls or home-rooms. In a number of schools they assume responsibility for discipline, but the tendency is to relieve student governments of this function (425, 474, 475, 531, 589, 591, 598, 625).

Typical values attributed to student participation in government are developing character, training in cooperation, training for worthy citizenship, maintaining morale, stimulating scholarship, training in assuming responsibility and leadership, and providing for pupil expression (531, 596, 625). A summary of guiding principles is presented by Drewry (474).

The introduction of student government depends largely upon publicity and promotion by administrative officers. There appears to be no strong demand among pupils to participate in administrative or governmental affairs (596, 625). A large percent of students are favorable to student government in schools into which it has been introduced (589).

High-school principals, from whom opinions have been secured, generally consider pupil participation to be operating successfully (625). Certain difficulties and limitations which have been indicated in several studies are the irresponsibility of pupils and lack of faculty cooperation (525, 596).

CHAPTER EIGHT

Adjustments and Classifications in Colleges and Universities

Scope of This Review

THE subject of providing for individual differences in the elementary and secondary schools has been presented very completely in a previous issue of the *Review of Educational Research* (637). This discussion is limited, therefore, to the presentation of studies dealing with adjustments and classifications in colleges and universities, excepting that some of the bibliographical citations may include references to adjustments at the lower educational levels.

The reader will also find in the issue of the *Review* (637) mentioned above a summary of the basic premises with reference to the nature and extent of individual differences upon which the adjustments in educational programs at various levels are based. No attempt is made, therefore, to review in this presentation studies which establish the fact of individual differences as an argument in favor of the homogeneous grouping of students for purposes of instruction. It is the purpose of this section, then, to present data and conclusions with reference to the various types of adjustment which are being employed, the extent to which each type of adjustment is used, and critical judgments and evaluations of each procedure.

Honors Courses

In 1929-30 approximately 37.5 percent of the institutions in the accredited list of the Association of American Universities were offering honors work. The total number of students who were participating in honors work did not exceed twenty in more than one-third of the institutions from which exact data were available. In five institutions the numbers ranged from forty to eighty. In about one-fifth of the institutions the honors work was equivalent to ten hours or less per week, while in a few it amounted to a maximum of sixty hours per week (689). Rockwell (683) reported several years earlier that four-fifths of a group of colleges from which he had data were offering honors courses in English. Inasmuch as a considerable number of the colleges from which information was requested made no report, it is probable that a much smaller percent of all the colleges included in the study had provisions for work of this type.

In most institutions eligibility to honors work is based upon the previous academic record of the student. The honors work in some instances consists in special assignments added to the regular program of the student; in others it consists in work which supersedes the regular program (636, 641, 691).

Brooks (641), upon the basis of the operation of honors courses at Swarthmore, stated the advantages to be as follows: (a) the plan increased the average amount of time devoted to the work of honors students; (b) honors students increased their reading during vacation periods; (c) many students not working for honors followed the example of honors students in reading during vacation; (d) the honors plan increased the number of students who enter upon graduate study; (e) honors graduates themselves are strongly in favor of the honors plan.

Rockwell (683) found administrative officers in forty-two colleges having honors courses reluctant to express an opinion regarding the success of the plan. He found the following difficulties in the operation of the courses: (a) the unpreparedness of the American academic mind for the idea underlying honors courses; (b) an inadequate background in literature and language among students; (c) a timidity on the part of students and their parents because of the apparently severe requirements of the work; (d) failure to provide for the courses in the regular teaching schedules of instructors; (e) a tendency to organize the courses too highly and to carry them out too much in the spirit of graduate work.

Sinclair and Taylor (689) found, on the other hand, that in a large majority of the eighty-one institutions from which they had data the plan was considered successful; a few had adopted it too recently to give a report; and a few others were in some doubt regarding the success with which it operated. Referring to honors work at Stanford University, Terman (691) expressed the belief that the plan offers the best means of providing for the superior student.

General reading for undergraduates is closely related to honors work in that it endeavors to encourage students to read independently of courses in which they enrol. Comments from various institutions into which general reading has been introduced are on the whole favorable to the plan (654).

Individual Instruction

This discussion includes preceptorial and tutorial instruction and various adaptations of the Dalton Plan to college students (656, 663, 674, 690). Attempts to adapt the Dalton Plan of instruction to college students were reported to be satisfactory, but no objective data were given to show its effectiveness as compared with other plans (656, 690). The views of those who have experimented with the Dalton Plan may be summarized as follows:

Favorable to the plan

- (a) The instructor becomes better acquainted with the method of work and the problems of individual students.
- (b) Leadership and more effective study are stimulated.
- (c) Individual differences are provided for.
- (d) Students are enabled to pursue their line of interest without interruption.
- (e) Problems of discipline are eliminated.

Unfavorable to the plan

- (a) More time on the part of the instructor is required.
- (b) Individual conferences require duplication of effort.
- (c) No development of class spirit or opportunity for oral expression occurs.
- (d) Indifferent students may sink to a low level of effort.
- (e) The plan does not fit into an educational scheme constructed on the recitation basis.

A report to the American Association of University Professors by Perry (674) in 1924 indicates that, on the whole, preceptorial and tutorial instruction was successful at Princeton and Harvard respectively. The chief difficulties in the administration of these systems of instruction were the increased cost involved, the difficulty in securing well qualified preceptors and tutors, and the problem of adjusting this method of procedure, including general examinations, to the traditional system of course requirements.

Special Remedial Instruction

This type of work is usually provided in non-credit courses in grammar and composition, in special diagnostic and remedial work in the fundamental subjects such as reading and spelling, or in courses in how to study (638, 639, 647, 675, 682, 693, 696, 697).

Data secured from forty state universities by Parr (672) showed that only nine of these institutions were making any attempt to provide remedial work for students who were deficient in reading ability. Generally, the remedial instruction in these nine institutions was given in "How To Study" courses or in special groups organized for failing students. The time devoted to this work ranged from two to thirty-six weeks with meetings varying from three times per week to once every two weeks. Among seventy-four land grant colleges and universities Klein (660) found twenty which were conducting courses in "How To Study."

Experiments with remedial work in reading generally result in an increased reading efficiency and in a reduction of the percent of failures (638, 693, 696, 697). Guiler (652) likewise reported improvement in spelling, composition, punctuation, and handwriting as a result of diagnostic and remedial work with freshmen at Miami University. Special instruction in how to study appears to be justified upon the basis of improved performance on the part of students in institutions where such instruction has been employed (647, 658, 662, 675, 681).

Sectioning Classes on the Basis of Ability

Many institutions are grouping students for purposes of instruction according to ability. The criteria employed in grouping are intelligence test scores, high-school grades, scores in standardized and unstandardized placement tests, previous record in college, and combined scores in placement and intelligence tests (641, 642, 645, 648, 650, 655, 661, 662, 665, 669, 670, 679, 682, 695). Placement tests in specific subjects are held by

various investigators to be more valuable in sectioning students according to ability than are tests of general aptitude (661, 682, 686, 692).

While numerous reports of experiments in sectioning classes in different institutions are available, few investigations have been made to find how generally this procedure is employed. Klein (660) found that among seventy-four land grant institutions thirty-two sectioned classes in English, twenty-four sectioned classes in mathematics, fifteen sectioned classes in chemistry, ten sectioned classes in language, and four sectioned classes in other subjects, upon the basis of the ability of students. Reeves (679) reported that, out of seventy junior colleges, twenty-seven employed ability grouping in some or all subjects. In these institutions the practice was most common in courses in English. Reports from thirty-five liberal arts colleges surveyed by Reeves and others (680) indicated that twenty-six colleges classified students according to ability in some courses. Raubenheimer and Touton (678) and Reeves and others (680) showed that tests are used as a basis for adjusting programs.

The general values which theoretically result from grouping students according to ability were summarized by Seashore (688). He (687) concluded further that sectioning on the basis of ability has met with success where tried. Reeves (679) supported this conclusion.

The objective evidence regarding the advantages and disadvantages of sectioning classes upon the basis of ability is inconclusive. Tharp (692) advocated sectioning modern language classes into high and middle-low groups. Burt and others (643) concluded that in elementary psychology there was no advantage in homogeneous grouping as far as efficiency of instruction was concerned. From the standpoint of the students there was an advantage in that the high and average groups covered the content of the course at a more rapid pace. Colton (644) found that segregation of superior students in zoology gave them an advantage but that other sections were "loggy," due to the absence of the superior students. Ullrich (695), in an experiment in elementary methods, found that students in a high section could do the work of the course in 60 percent of the time allowed; those in a middle section could complete the work in 80 percent of the time allowed. The total achievement of the students measured in terms of an objective final examination, however, showed no beneficial results from sectioning. Other investigators experimenting with sectioning classes in English, thermo-dynamics, and engineering drawing considered the plan advantageous in certain respects but gave no data (645, 669, 670).

Other Types of Adjustment

Several other types of adjustment have been described (671) but no data showing their effectiveness have been found. Most significant are the Experimental College at Wisconsin, the new Junior College at Minnesota, the reorganization at Chicago, the new curriculum at Rollins, the Bennington program, the short curriculum for superior students at Buffalo, and the Antioch program.

CHAPTER NINE

Special Schools and Classes

IN attempting to provide for individual differences among pupils, the public schools have found it necessary to organize special schools and special classes in addition to classifying pupils and making other adjustments which can be cared for within the regular school organization. These special schools and classes take exceptional children from regular class groups for varying periods of time, and make those special provisions which are necessary for educating each type; these types include the blind, the crippled, the deaf, the anemic, the speech defective, the gifted, the mental defective, and the truant and delinquent. Such a program is commonly referred to as *special education*, and these various types of children are commonly grouped under three headings as mentally, physically, and socially exceptional children.

In this review the administration, organization, and development of such programs are emphasized; the psychology of exceptional children was given attention in a previous issue of the *Review of Educational Research* (757). This limitation reduces greatly the research material in the field; the general literature covering this limited field, however, is very extensive. A single bibliography (792), prepared in 1925 relating to gifted children, contained 555 titles. The annual *Proceedings* of the National Education Association have, for many years, contained a series of articles and reports relating to various phases of special education. The proceedings of other organizations as well as an increasing number of current periodicals contain articles dealing with problems of organizing special schools and classes. This vast reservoir of literature has, for the most part, been ignored in this review. There are included, however, some reports, not strictly research, which help the reader to visualize the extensiveness of the development of this relatively new special education program.

General Studies

Campbell (714) reported in 1905 the results of a survey of special education which had its origin in 1902 at a meeting of the Department of Special Education of the National Education Association at Minneapolis. A questionnaire was sent to American and European cities. Practically no data were available at that time; a few cities were in the process of gathering needed data; others had none to report. Van Sickle, Witmer, and Ayres (786) described the work done in thirty-nine American cities in 1911. McDonald (751) in 1915 described in considerable detail the development of special education programs for caring for nine different types of exceptional children; he pointed out three stages in this development. Private or philanthropic agencies usually organized the special programs first; states

then made special provisions for many of these handicapped children; and finally local school districts began to provide the needed schooling. Horn (740) reported in 1924 the status of special education programs for cities in the United States of 200,000 population or over. He gave special attention to incorrigibles, blind, deaf, cripples, gifted, sub-normals, and children with speech defects.

Hilleboe (738:30-34), by an extensive survey of the literature of the field, found that 11.21 percent of the school population deviated so much from the normal as to require special class facilities. He studied, by visitation, eighteen cities where good programs of special education had been organized. Broady (712) likewise studied, in some detail, the special education programs of eighteen cities; he analyzed policies followed in organizing special classes, and from this analysis determined the data which needed to be kept at school concerning pupils. Heck (735) in 1930 reported the extent to which cities had organized special schools and classes; he had reports from 736 of the 762 cities in the United States of 10,000 population and over.

There are available comprehensive reports concerning the special education programs of various cities. Bruner (713) reported for Chicago in 1924; Cleveland, Ohio (717, 718), issued one report in 1928 and a second in 1931; Berry (705) reported for Detroit in 1925; Los Angeles (748) reported in 1931; and New York City (760) reported in 1922. These reports give a brief history of the development of each type of work and describe in some detail the aims and programs of the work now organized. Berry (703) also described in some detail the state program of special education for Michigan.

There are four textbooks in this field, each of which is based upon a great amount of research. Wallin (788) dealt with the education of handicapped children and emphasized particularly a public-school program for mental defectives. Scheidemann (774) gave brief consideration to administrative measures for educating exceptional children; her special contribution, however, was the excellent summarization which she gave of the numerous researches having to do with the psychology of exceptional children. The White House Conference on Child Health and Protection (791) has an extensive report on special education in which the most recent data concerning the number of exceptional children, the number of children cared for, typical provisions for educating them, and the usual programs for helping them physically are reported. This study constitutes a most valuable source book for information concerning the education of all types of exceptional children. Amoss and De La Porte (701) have a new volume off the press which contains an excellent report of the work which the Province of Ontario, Canada, is doing for its handicapped children; the mentally, physically, and socially handicapped are included in the program described.

The Blind

The U. S. Bureau of Education published reports by Bonner (709) in 1920 and Phillips (764) in 1928 showing the extent to which schools and classes had been organized for the blind, and one by Allen (700) in 1921 in which special features of the work of educating the blind were noted. Cleveland, Ohio (719), made a survey of all work it was doing for the blind as early as 1918. Romaker (771) studied by questionnaire the public-school program of educating the blind and other children with serious defective vision in thirty-nine cities of the United States; housing facilities, teaching staff, pupil personnel, curriculum and other facilities were considered. Cowdery (721) analyzed the school codes of the forty-eight states in determining state aid and state control of educating the blind. In 1919 Best (706) prepared a text based upon extensive research which reviewed the work which was being done throughout the country in educating and caring for the blind. From the point of view of administering and organizing sight saving classes, Hadley (728), Hadley and Hathaway (729), and Lawes (745) made important contributions. Hadley described the state plan developed in Ohio; Hadley and Hathaway dealt with similar topics but generalized their suggestions; Lawes emphasized methods of instruction rather than problems of administration.

The Crippled

E. Reeves (766) has one of the earliest and most comprehensive studies of the methods of caring for and educating crippled children; she stressed the necessity of finding at the earliest possible date children suffering from crippling diseases. The same writer, under the name of Solenberger (777), four years later in 1918 gave a vivid description of the public-school classes then organized for crippled children; this report serves to emphasize the progress made in the past fifteen years. Only two cities at that date had provided special school buildings for cripples. Abt (699) in 1924 surveyed American facilities for educating crippled children; he also gave a brief history of the development of modern care for cripples. He estimated the average number of cripples under sixteen at 2.5 per 1,000. Heck (735) in 1930 reported on the housing facilities, training of teachers, equipment, care of children, and costs for twenty-seven cities which had organized schools or classes for crippled children.

Upson and Matson (785) studied the problem of caring for and educating cripples in Michigan; they concluded that cities were doing good work but that rural areas needed help. Chatterton (715) described the Minnesota plan of caring for crippled children. New Jersey (759), through its specially appointed commission, surveyed the state's provision for educating cripples; recommendations were made for a continuous registration of cripples and for state aid to local districts. Tuttle (781) showed the results of a state-wide census of cripples in North Carolina; so many

cripples were discovered that numerous organizations in the state united in a determined effort to secure state aid in caring for them. Hadley (727) described in detail Ohio's plan of educating the crippled; state aid is given and local districts are encouraged to assume responsibility for organizing sufficient special classes in the public schools to care for and educate all their cripples. Steiner (779) and Keesecker (742) analyzed the state laws governing the education of crippled children. Howett (741) presented briefly the development of various types of legislation governing the education of cripples. Hare (732) made a detailed study of 150 crippled children; all were under eighteen years of age with an average age of eight. She confirmed the views that (a) the greatest cause is disease, (b) mental ability is normal, (c) special schools are greatly needed, and (d) further legislation should be had. McMurtrie (753) in 1913 prepared a bibliography of 724 titles dealing with crippled children; this contains both American and European references.

The Deaf and Hard of Hearing

Fay (724), acting as editor, had published in 1893, in three volumes, histories of American schools for the deaf; there were eighty-seven such histories including the histories of eighteen private schools, seven schools in Canada, and one in Mexico. Best (707) in 1914 brought up to date the major features of methods of educating the deaf and described briefly the development of the work being done at that date. Fوسفeld (725) reported an extensive and detailed survey of twenty-nine residential schools for the deaf; the type of management, financial support, legal status, hearing of pupils, and educational programs were all considered. Day, Fوسفeld, and Pintner (723) in 1928 reported a study of twenty-nine residential and fourteen public day schools for the deaf. Newark (761) reported in considerable detail the work done by its school for the deaf in 1921; the claim was made that "practically every deaf child can be taught to read the lips and speak with sufficient ease for familiar social and for business uses." Bonner (710) and Phillips (765) reported a statistical survey of schools and classes for the deaf of the United States in 1920 and 1928 respectively. Hall (730) gave a brief account of the educational programs for the deaf in 1921 and outlined an ideal compulsory education law. Cowdery (721) analyzed the school codes of the forty-eight states as they dealt with the problem of educating deaf children. Upshall (784) compared day schools and institutions. He concluded that day schools get brighter pupils; that pupils in day schools have greater residual hearing; and that even after mental ability factors are made equal there is still a real difference in educational achievement in favor of the day schools. Long (747) studied the motor abilities of deaf children compared to similar abilities of a control group of hearing children. Deaf boys were superior while deaf girls were inferior; the sexes combined showed deaf and hearing groups to be equal. Madden (754) studied the school status of the hard-of-hearing children. He

found very little relation between the amount of hearing and the scores on intelligence tests; the tests did not indicate "that hard-of-hearing children have a language handicap"; and there were no differences in achievement between the hearing and the hard of hearing when intelligence was held constant.

Delicate Children

Kingsley (743) reported in 1916 the extent to which open-air schools and classes had been organized. He traced the development of such schools both in Europe and America. The first such school was formally opened at Charlottenburg, Germany, near Berlin, August 1, 1904. Kingsley also reported on sites, buildings, equipment, costs, health supervision, and pupils. MacDonald (750) gave considerable historical data, but placed great emphasis on researches which tend to show the value to pupils, educationally and physically, of open-air schools. Rogers (768) reported in 1930 the status of open-air schools and classes; he gathered data concerning methods of organizing and administering them, the work they do, and the results secured. He presented an extensive selected bibliography.

Speech Defectives

Blanton (708) in 1916 made a survey of children at Madison, Wisconsin, to determine the number with speech defects in grades below the high school. He concluded that 5 percent were suffering from speech defect and urged that kindergarten, first-grade, and second-grade teachers have speech training in order to prevent as well as help remedy defects. In the same year Wallin (787) reported a survey of speech defectives for St. Louis; it was discovered that 2.8 percent of all pupils enrolled had speech defects. Wallin studied speech defect in relation to left handedness; he concluded that the "vast majority of our left handed pupils who had been taught to write with the right hand had not developed any speech defect." Root (773) in 1926 made a survey in the elementary schools of South Dakota; he discovered that 6.3 percent had speech defects.

Root (772), Rogers (769), and Lemmon (746) studied the extent to which public-school systems were giving special aid to children with speech defects. Root gave some emphasis to percent of cures; both the other men gave special attention to the special program of work which cities were providing. Materials which would aid the parent, the regular teacher, or the special class teacher in correcting speech defects were scarce before 1923. Upon the basis of considerable practical experience, McCullough and Birmingham (749), Peppard (762), Scripture (775), Borden and Busse (711), and Rogers (770) prepared materials which were designed to help children overcome speech defects.

McDowell (752) compared educationally and emotionally stuttering children with non-stuttering children in the New York City schools; she concluded that the two groups showed "a surprising amount of similarity." Berry and Stoddard (704) studied the effect of special training on a group of lispers; the experimental group showed 29 percent improvement while the control group showed only 2 percent. Morrison (756) showed that prompt discovery and immediate training in the first grade brought large results in the way of improved speech.

Gifted Children

An early and outstanding experiment with gifted children was that of Henry at the University of Illinois; it was reported by both Henry (737) and Whipple (790), the latter being the adviser on this project. It was found that drill and explanation could be reduced by 50 percent for the gifted child and that discipline was no problem. Both men included good and extensive bibliographies dealing with gifted children. Cleveland (716) in 1920 reported the problems that Detroit faced in organizing classes for gifted children; these classes were begun in 1915; richness of course of study was emphasized. Stedman (778) in 1924 described her five years experience with gifted children in California. An intelligence quotient of 125 was first used as the basis of selection; this was later raised to 140. Goddard (726), on the basis of two days observation each month for a period of five years, gave an excellent report of the organization of public-school classes for gifted children at Cleveland. Numerous tests were given the children to ascertain status and progress. Lamson (744) studied fifty-six gifted high-school pupils in comparison with a control group. These gifted children were superior in every activity, they behaved better, and did not suffer in health. Coy (722) studied interests, abilities, and achievements of gifted children when compared with a control group; the experimental group asked more questions, volunteered more, and made more critical remarks. The National Society for the Study of Education (758) devoted its twenty-third yearbook to an extended study of gifted children. The history of the movement, methods of selecting gifted children, problems of organizing classes, curricular problems, and traits of such children were considered. A bibliography of 454 titles was included. Hollingworth (739) presented data concerning characteristics of the gifted. Williams (792) surveyed by a questionnaire the extent to which public-school classes were organized; typical provisions were described. An annotated bibliography of 555 titles was included in the latter study.

Mental Defectives

Research dealing with mental defectives is so vast that this report has limited itself strictly to a few studies of the organization of schools and

classes at public expense. Anderson (702), upon the basis of extended experience with public-school classes for mental defectives, reported upon the selection of pupils, curriculum used, trade classes, and the relation of such classes to the public-school system and to the community. Phillips (763) showed the extent to which such schools and classes had been organized in the United States. Hamilton and Haber (731) and Steiner (779) made analyses of the school codes of the forty-eight states to determine the extent to which legal provision was made to care for and educate mentally defective children.

Metzner and Engel (755), upon the basis of many years of experience in teaching mental defectives in public-school classes, reported a course of study adapted to the needs of such children; they were assisted in preparing the course by committees of special class teachers of the Detroit public-school system. Woolley and Ferris (793) studied over a period of four years a small group of young school failures in the Cincinnati school system; the report is primarily composed of a detailed case study of the children.

Truants and Delinquents

M. Reeves (767) made a personal visit to each of 57 schools for truant and delinquent girls and gathered data concerning methods of control, staff, salaries, location of plant, buildings, equipment, current expense, records, medical service, social hygiene, general physical care, education, and parole. Slawson (776) summarized many studies on delinquency; he particularly studied statistically the relative strength of mental, physical, and environmental factors in causing delinquency. He found that although intelligence is a factor in delinquency it has been greatly exaggerated, due to failure to consider social status and parentage; emotional instability is a factor; and school discouragement is not insignificant. Healy and others (734), after an eight year study, reported a technic of child placement which seems to be effective. Cooley (720) conducted an experiment in working out an effective methodology of probation which could be used generally; in this report he set up standards and methods of probation used in the two years experiment. The U. S. Children's Bureau (782, 783) made field studies of truancy and delinquency both in the Dakotas and in Georgia; their reports indicate the inadequacy of the care now given to those youths who are socially handicapped. Court records, judges, officials, school authorities, and social agencies were consulted. Healy (733) on the basis of five years work with delinquents, indicated some of the forces driving youths in the direction of delinquency; the conditions of childhood are cited as being very important. He concluded that "practically all confirmed criminals begin their careers in childhood or early youth"; therefore, says he, "the best rewards of therapeutic efforts are from working with youths."

Rural Problems

Rural schools face problems in providing special education not faced by schools in cities. A given rural community has very few handicapped children; in order to form a class for a given type, children with that handicap must be drawn from a large territory. Expert medical care is not so readily available as in the city. Parents in a given community are well acquainted and the problem of selection is thereby complicated. Warner (789) and Sumption (780) have studied this problem in two counties in Ohio. They gathered data which indicate the feasibility of establishing a central county school for exceptional children. They have not considered the problem involved in selection due to personal factors resulting from intimate acquaintance. The rural problem should receive much more attention than it has up to date.

BIBLIOGRAPHY ON PUPIL PERSONNEL, GUIDANCE, AND COUNSELING

Chapter I. School Attendance

1. ABBOTT, EDITH, and BRECKINRIDGE, SOPHRONISBA P. *Truancy and Non-Attendance in the Chicago Schools*. Chicago: University of Chicago Press, 1917. Chapters 1-5, p. 1-88.
2. AYER, ADELAIDE M. "A Study of Rural School Attendance." *Journal of Rural Education* 4: 385-98; May-June, 1925.
3. AYRES, LEONARD P. "Irregular Attendance—A Cause of Retardation." *Psychological Clinic* 3: 1-8; March 15, 1909.
4. AYRES, LEONARD P. *Laggards in Our Schools*. New York: Russell Sage Foundation, 1909. 236 p.
5. AYRES, LEONARD P. "A Simple System for Discovering Some Factors Influencing Non-Promotion." *Psychological Clinic* 4: 189-92; December 15, 1910.
6. BAILEY, BASIL A. *The Extension of High School Opportunity in Ohio from 1890 to 1914 to Pupils Living in Districts Not Maintaining a High School*. Unpublished master's thesis, Ohio State University, 1932. 80 p.
7. BERMEO, F. V. *The School Attendance Service in American Cities*. Menasha, Wis.: George Banta Publishing Co., 1923. 183 p.
8. BIRKELO, C. P. "A Complete Census, Its Function and Value." *American School Board Journal* 65: 76; November, 1922.
9. BITLER, LAUREN O. *The Bing Compulsory Education Law—Its History and Operation*. Unpublished master's thesis, Ohio State University, 1922. 119 p.
10. BOLT, RICHARD ARTHUR. "Attendance at the University High School." *University High School Journal (University of California)* 7: 1-15; April, 1927.
11. BOLT, RICHARD ARTHUR. "Effect of Influenza and Smallpox upon Attendance at the University High School." *University High School Journal (University of California)* 9: 22-29; May, 1929.
12. BONNER, H. R. "Compulsory Attendance Laws." *American School Board Journal* 60: 46-47, 106; February, 1920.
13. BONNER, H. R. *Private High Schools and Academies, 1917-18*. U. S. Dept. of the Interior, Bureau of Education, Bulletin, 1920, No. 3. Washington, D. C.: Government Printing Office, 1920. 80 p.
14. BONNER, H. R. *Statistics of State School Systems, 1917-18*. U. S. Dept. of the Interior, Bureau of Education, Bulletin, 1920, No. 11. Washington, D. C.: Government Printing Office, 1920. 155 p.
15. BONNER, H. R. "Waste in Education." *American School Board Journal* 63: 33-35, 124; July, 1921.
16. BOOHER, CLOYCE EUGENE. *Operation of the Bing Law in Highland County, Ohio*. Unpublished master's thesis, Ohio State University, 1930. 100 p.
17. CHANNING, ALICE. *Child Labor on Maryland Truck Farms*. U. S. Dept. of Labor, Children's Bureau, Bureau Publication, No. 123. Washington, D. C.: Government Printing Office, 1923. 52 p.
18. CLOPPER, EDWARD N. "Causes of Absence from Rural Schools." *Proceedings, 1918*. Vol. 56. Washington, D. C.: National Education Association, 1918. p. 668-71.
19. COOK, W. A. "A Brief Survey of the Development of Compulsory Education in the United States." *Elementary School Teacher* 12: 331-35; March, 1912.
20. COOPER, HERMANN. *An Accounting of Progress and Attendance of Rural School Children in Delaware*. Contributions to Education, No. 422. New York: Teachers College, Columbia University, 1930. 150 p.
21. COOPER, RICHARD WATSON, and COOPER, HERMANN. *Negro School Attendance in Delaware*. Newark, Del.: University of Delaware Press, 1923. 389 p.
22. COOPER, RICHARD WATSON, and COOPER, HERMANN. *The One-Teacher School in Delaware; a Study in Attendance*. Newark, Del.: University of Delaware Press, 1925. 434 p.

23. DEFFENBAUGH, W. S. "Compulsory Attendance Laws in the United States." *Compulsory School Attendance*. U. S. Dept. of the Interior, Bureau of Education, Bulletin, 1914, No. 2. Washington, D. C.: Government Printing Office, 1914. p. 7-77.
24. DENIUS, HARRY G. *The Legal Status of the School Attendance Official in the Several States*. Unpublished master's thesis, Ohio State University, 1926. 68 p.
25. DEPRIEST, LELAND ELIAS. *The History of Compulsory Attendance in Ohio from 1900 to 1929*. Unpublished master's thesis, Ohio State University, 1930. 341 p.
26. DILEY, JAMES MONETTE. *The Development of a Compulsory System of Education for Ohio, down to 1900*. Unpublished master's thesis, Ohio State University, 1930. 128 p.
27. DURBIN, BERNARD MARCELLUS. *The Extent to Which Pupils of Junior and Senior High School Age Fulfill the Requirements of the Bing Law in Seneca County*. Unpublished master's thesis, Ohio State University, 1930. 55 p.
28. ECKARD, GARRY. *An Analysis of Some Features of the Compulsory Attendance Laws of the Forty-Eight States with Special Reference to Exemptions*. Unpublished master's thesis, Ohio State University, 1924. 97 p.
29. EDWARDS, MARCIA. "College Enrollment during Times of Economic Depression." *Journal of Higher Education* 3: 11-16; January, 1932.
30. EMMONS, FREDERICK EARLE. *City School Attendance Service*. Contributions to Education, No. 200. New York: Teachers College, Columbia University, 1926. 173 p.
31. ENSIGN, FOREST CHESTER. *Compulsory School Attendance and Child Labor*. Iowa City, Iowa: Athens Press, 1921. 263 p.
32. FARLEY, GEORGE L. "Causes of Non-Promotion." *Psychological Clinic* 6: 256-59; February 15, 1913.
33. FOSTER, LAURENCE F. "An Analysis of School Absenteeism Resulting from Illness." *University High School Journal (University of California)* 11: 98-111; August, 1931.
34. GIBBONS, CHARLES E., and STANSBURY, CHESTER T. *Administration of the Child Labor Law in Ohio*. New York: National Child Labor Committee, 1931. 66 p.
35. HAND, WILLIAM H. "The Need of Compulsory Education in the South." *Compulsory School Attendance*. U. S. Dept. of the Interior, Bureau of Education, Bulletin, 1914, No. 2. Washington, D. C.: Government Printing Office, 1914. p. 99-110.
36. HANSON, WHITTIER LORENZ. *The Costs of Compulsory Attendance Service in the State of New York, and Some Factors Affecting the Cost*. Contributions to Education, No. 158. New York: Teachers College, Columbia University, 1924. 122 p.
37. HAWS, ROBERT WASHINGTON. *The Attitudes of Pupils in the Public Schools of Hamilton, Ohio, toward Compulsory School Attendance*. Unpublished master's thesis, Ohio State University, 1932. 129 p.
38. HECK, ARCH O. *Administration of Pupil Personnel*. Boston: Ginn and Co., 1929. 479 p.
39. HECK, ARCH O. *A Study of the Ohio Compulsory Education and Child Labor Laws*. Bureau of Educational Research Monographs, No. 9. Columbus: Ohio State University, 1931. 210 p.
40. HIATT, JAMES S. *The Truant Problem and the Parental School*. U. S. Dept. of the Interior, Bureau of Education, Bulletin, 1915, No. 29. Washington, D. C.: Government Printing Office, 1915. 35 p.
41. "High School Enrollment in Canada." *A. T. A. Magazine (Alberta Teachers' Alliance)* 12: 8-10; September, 1931.
42. HOOD, WILLIAM R. *Digest of State Laws Relating to Public Education in Force January 1, 1915*. U. S. Dept. of the Interior, Bureau of Education, Bulletin, 1915, No. 47. Washington, D. C.: Government Printing Office, 1915. 987 p.
43. KEESECKER, WARD W. *Laws Relating to Compulsory Education*. U. S. Dept. of the Interior, Bureau of Education, Bulletin, 1928, No. 20. Washington, D. C.: Government Printing Office, 1928. 70 p.
44. KUNTZ, HARRY EARL. *The Operation of the Ohio Compulsory Education Law in Medina County*. Unpublished master's thesis, Ohio State University, 1930. 134 p.

45. LIEBLER, C. C. "Court Decisions Affecting the Enforcement of Compulsory Education." *American School Board Journal* 77: 49-50; October, 1928.
46. LIEBLER, C. C. "Qualifications and Compensation of Persons Charged with the Enforcement of Compulsory Education." *Elementary School Journal* 27: 695-706; May, 1927.
47. MARKSBURY, MARY R. *The Development and Testing of a Plan for Improving Attendance in a Junior High School*. Unpublished master's thesis, Ohio State University, 1928. 89 p.
48. MARTIN, GEORGE H. *The Evolution of the Massachusetts Public School System*. New York: D. Appleton and Co., 1894. 284 p.
49. MARYLAND DEPARTMENT OF EDUCATION. "Compulsory School Attendance." *Fifty-First Annual Report of the State Board of Education Showing Condition of the Public Schools of Maryland for the Year Ending July 31, 1917*. Baltimore: the Department, 1917. p. 32-74.
50. NATIONAL EDUCATION ASSOCIATION, DEPARTMENT OF SUPERINTENDENCE. "The Articulation of the Units of American Education." *Seventh Yearbook*. Washington, D. C.: the Association, 1929. Chapter 12, "Number, Size, and Distribution of Various Secondary School Units—'Regular' and 'Reorganized' High School," p. 208-20.
51. NATIONAL EDUCATION ASSOCIATION, RESEARCH DIVISION. "The Advance of the American School System." *Research Bulletin* 5: 195-223; September, 1927. "Progress in School Attendance," p. 206-7.
52. NATIONAL EDUCATION ASSOCIATION, RESEARCH DIVISION. "Can the Nation Afford to Educate Its Children?" *Research Bulletin* 6: 259-92; November, 1928. "Schooling for All," p. 261-62.
53. NATIONAL EDUCATION ASSOCIATION, RESEARCH DIVISION. "The Outlook for Rural Education." *Research Bulletin* 9: 231-302; September, 1931. "Better Attendance in Rural Schools," p. 251-55.
54. NATIONAL EDUCATION ASSOCIATION, RESEARCH DIVISION. "Population at Various School Levels and Number Attending School According to the 1930 Census." *Journal of the National Education Association* 21: 34; January, 1932.
55. NATIONAL EDUCATION ASSOCIATION, RESEARCH DIVISION. "Public Elementary and Secondary Education in 1930." *Journal of the National Education Association* 21: 126; April, 1932.
56. NEW JERSEY DEPARTMENT OF PUBLIC INSTRUCTION. "A Study of the Growth of High School Enrollment." *Education Bulletin* 18: 745-50; April, 1932.
57. NUDD, HOWARD W., Compiler. *A Description of the Bureau of Compulsory Education of the City of Philadelphia*. New York: Public Education Association of the City of New York, 1913. 62 p.
58. ODELL, C. W. *The Effect of Attendance upon School Achievement*. University of Illinois Bulletin, Vol. 20, No. 31, Educational Research Circular, No. 16. Urbana, Ill.: the University, 1923. 8 p.
59. OVERHOLT, WARD H. *A Study of the Functioning of the Bing Law in the County School System of Franklin County, Ohio*. Unpublished master's thesis, Ohio State University, 1930. 45 p.
60. PERRIN, JOHN W. "Beginnings in Compulsory Education." *Educational Review* 25: 240-48; March, 1903.
61. PHILLIPS, FRANK M. "Educational Rank of States, 1930." *American School Board Journal* 84: 25-29; February, 1932.
62. PHILLIPS, FRANK M. "Educational Rank of the States, 1930." *American School Board Journal* 84: 29-30; April, 1932.
63. PHILLIPS, FRANK M. "Public High-School Enrollments, by Size and Accreditation." *American School Board Journal* 74: 46, 159; April, 1927.
64. REAVIS, GEORGE H. *Factors Controlling Attendance in Rural Schools*. Contributions to Education, No. 108. New York: Teachers College, Columbia University, 1920. 69 p.
65. RYAN, W. CARSON. "Compulsory Education in Germany." *Compulsory School Attendance*. U. S. Dept. of the Interior, Bureau of Education, Bulletin, 1914, No. 2. Washington, D. C.: Government Printing Office, 1914. p. 94-98.
66. SEYERS, JACOB DUGAN. *To What Extent Are Pupils Sixteen and Seventeen Years of Age Forced to Remain in School by Operation of the Bing Law*. Unpublished master's thesis, Ohio State University, 1931. 115 p.

67. SLOAN, PAUL W. *A Study of the Present Status of the County Attendance Officers in Ohio*. Unpublished master's thesis, Ohio State University, 1927. 77 p.
68. SMITH, ANNA TOLMAN. "Compulsory Attendance in Foreign Countries." *Compulsory School Attendance*. U. S. Dept. of the Interior, Bureau of Education, Bulletin, 1914, No. 2. Washington, D. C.: Government Printing Office, 1914. p. 78-93.
69. STRAYER, GEORGE D., director. *Report of the Survey of Certain Aspects of the Public School System of Springfield, Massachusetts*. Springfield, Mass.: Board of Education, 1924. p. 39-48.
70. STRAYER, GEORGE D., director. *Report of the Survey of the Public School System of Atlanta, Georgia*. Vol. 2. Atlanta, Ga.: Board of Education, 1922. p. 40-59.
71. STRAYER, GEORGE D., director. *Report of the Survey of the Public School System of the Town of Stamford, Conn.* Stamford, Conn.: Board of Education, 1923. p. 22-28.
72. THOMAS, PEARL WILLIAM. *The Extent to Which Pupils Thirteen to Eighteen Years of Age Are Forced to Remain in School by Operation of the Bing Law*. Unpublished master's thesis, Ohio State University, 1932. 133 p.
73. U. S. DEPARTMENT OF LABOR, CHILDREN'S BUREAU. *Child Labor and the Work of Mothers on Norfolk Truck Farms*. Bureau Publication, No. 130. Washington, D. C.: Government Printing Office, 1924. 27 p.
74. U. S. DEPARTMENT OF LABOR, CHILDREN'S BUREAU. *Child Labor in North Dakota*. Bureau Publication, No. 129. Washington, D. C.: Government Printing Office, 1923. 67 p.
75. U. S. DEPARTMENT OF LABOR, CHILDREN'S BUREAU. *The Welfare of Children in Cotton-Growing Areas of Texas*. Bureau Publication, No. 134. Washington, D. C.: Government Printing Office, 1924. 83 p.
76. U. S. DEPARTMENT OF LABOR, CHILDREN'S BUREAU. *Work of Children on Truck and Small-Fruit Farms in Southern New Jersey*. Bureau Publication, No. 132. Washington, D. C.: Government Printing Office, 1924. 58 p.
77. U. S. DEPARTMENT OF THE INTERIOR, BUREAU OF EDUCATION. "Compulsory Attendance Laws in the United States." *Report of the Commissioner of Education, 1888-89*. Vol. I. Washington, D. C.: Government Printing Office, 1891. Chapter 18, p. 470-531.
78. WALTERS, RAYMOND. "Statistics of Registration in American Universities and Colleges." *School and Society* 26: 759-66, December 17, 1927. 28: 737-46, December 15, 1928. 30: 793-802, December 14, 1929. 32: 787-98, December 13, 1930. 34: 783-96, December 12, 1931. 36: 737-47, December 10, 1932.
79. ZIEGLER, CARL WILLIAM. *School Attendance as a Factor in School Progress*. Contributions to Education, No. 297. New York: Teachers College, Columbia University, 1928. 63 p.

Chapter II. School Progress

80. ALLTUCKER, MARGARET M. "Is the Pedagogically Accelerated Student a Misfit in the Senior High School?" *School Review* 32: 193-202; March, 1924.
81. "Are Semi-Annual Promotions Desirable?" (A Symposium). *Journal of Education* 111: 387-88; 471-73; 499-500; April 7, April 28, May 5, 1930.
82. ARMSTRONG, CAROLINE, and DANIELSON, CORA LEE. "Classes for Educationally Retarded and Slow-Learning Children." *Third Yearbook of the Psychology and Educational Research Division*. School Publication, No. 185. Los Angeles: City School District, 1929. p. 44-48.
83. AYER, FRED C. *The Progress of Pupils in the State of Texas*. Research Bulletin of the Section of Superintendence, Texas State Teachers Association. Austin, Tex.: the Author, 1932. 35 p.
84. AYER, FRED C. *Studies in Administrative Research*. Department of Research Bulletin, No. 1. Seattle, Wash.: Public Schools, 1924. Chapter 7, "Progress of Pupils," p. 94-117.
85. AYER, FRED C. *Studies in Administrative Research*. Vol. II. Department of Research Bulletin, No. 2. Seattle, Wash.: Public Schools, 1925. Chapter 5, "Promotions and Failures," p. 107-26.

86. AYRES, LEONARD P. *Child Accounting in the Public Schools*. Cleveland: Survey Committee, Cleveland Foundation, 1915. 68 p.
87. AYRES, LEONARD P. *Laggards in Our Schools*. New York: Russell Sage Foundation, 1909. 236 p.
88. BAGLEY, WILLIAM C., and KYTE, GEORGE C. *The California Curriculum Study*. Berkeley, Calif.: University of California Printing Office, 1926. Chapter 17, "Pupil Mobility and the Curriculum," p. 295-316.
89. BAKER, HARRY J. *Educational Disability and Case Studies in Remedial Teaching*. Bloomington, Ill.: Public School Publishing Co., 1929. 172 p.
90. BARDEN, E. K. *The Progress of Pupils through the Grades in the State of Texas*. Unpublished master's thesis, University of Texas, 1931. 219 p.
91. BIXLER, H. H. *Analysis of Failures by Departments, Junior High School, Five-Year Period, 1924-1929*. Atlanta, Ga.: Board of Education, 1919. 8 p.
92. BLAN, LOUIS B. *A Special Study of the Incidence of Retardation*. Contributions to Education, No. 40. New York: Teachers College, Columbia University, 1911. 111 p.
93. BLOSE, D. T., and COVERT, TIMON. *An Age-Grade Study of 7,632 Elementary Pupils in 45 Consolidated Schools*. U. S. Dept. of the Interior, Office of Education, Pamphlet, No. 8. Washington, D. C.: Government Printing Office, 1930. 20 p.
94. BORGESON, F. C. "Causes of Failure and Poor School Work Given by Pupils." *Educational Administration and Supervision* 16: 542-48; October, 1930.
95. BRIGGS, E. E. "Studies of Failures in the Sioux City Public Schools." *Bulletin (Eighth Yearbook)* 8: 240-44; April, 1929. Washington, D. C.: Department of Elementary School Principals, National Education Association.
96. BROWNELL, S. M. "Preparing the Child To Meet the Demands of the First Grade." *Nation's Schools* 5: 37-41; June, 1930.
97. BRUMBAUGH, H. E. "Reducing Failures by a Plan of Alternative Dismissal, Holding Failing Pupils for Additional Instruction." *Journal of Educational Research* 23: 240-45; March, 1931.
98. BUCKINGHAM, B. R., chairman, and OTHERS. *The Classification of Pupils in Elementary Schools*. Special Studies Series, No. 5. Columbus, Ohio: State Department of Education, 1925. 160 p.
99. BUCKINGHAM, B. R. "An Experiment in Promotion." *Journal of Educational Research* 3: 326-35; May, 1921.
- ✓100. BUCKNER, MABEL A. "A Study of Pupil Elimination in the New Haven High School." *School Review* 39: 532-41; September, 1931.
- ✓101. CAMPBELL, EVERETT EVELETH. "A Study of Retardation and Class Standing on the Basis of Home Language Used by Pupils." *Elementary School Teacher* 14: 264-82; 331-47; February, March, 1914.
- ✓102. CHAUNCEY, MARLIN R. "The Relation of the Home Factor to Achievement and Intelligence Test Scores." *Journal of Educational Research* 20: 88-90; September, 1929.
103. COBB, MARGARET V. "The Limits Set to Educational Achievement by Limited Intelligence." *Journal of Educational Psychology* 13: 449-64; 546-55; November, December, 1922.
104. COLEMAN, WILLIAM CLIFTON. *A Job Analysis of the Causes of School Failure*. Unpublished master's thesis, Ohio State University, 1929. 88 p.
105. COOKE, DENNIS H. "A Study of School Surveys with Regard to Age-Grade Distribution." *Peabody Journal of Education* 8: 259-66; March, 1931.
106. COOPER, HERMANN. *An Accounting of Progress and Attendance of Rural School Children in Delaware*. Contributions to Education, No. 422. New York: Teachers College, Columbia University, 1930. 150 p.
107. CORBALLY, JOHN E. *Pupil Mobility in the Public Schools of Washington*. University of Washington Publications in the Social Sciences, Vol. 5, No. 2. Seattle, Wash.: the University, 1930. 95-180 p.
108. CORNELL, ETHEL L. "Why Are More Boys Than Girls Retarded in School?" *Elementary School Journal* 29: 96-105; 213-26; October, November, 1928.
109. CORNMAN, OLIVER P. *Promotion and Retardation in the Elementary Schools*. Philadelphia, 1906. 8 p.

110. COUNTS, GEORGE SYLVESTER. *The Selective Character of American Secondary Education*. Supplementary Educational Monographs, No. 19. Chicago: University of Chicago, 1922. 162 p.
111. COXE, W. W., chairman, and OTHERS. "School Organization." *Review of Educational Research* 1: 161-244; June, 1931. Washington, D. C.: American Educational Research Association, a department of the National Education Association.
112. DANIEL, MARY LOUISE. "Tallapoosa County Program for Removing First Grade Retardation." *Peabody Journal of Education* 8: 207-14; January, 1931.
113. EDMONSON, J. B. "Why High School Pupils Fail." *High School Quarterly* 13: 235-37; July, 1925.
114. "Educational Retardation of Children in Migratory Families." *Elementary School Journal* 30: 88-89; October, 1929.
115. FALKNER, ROLAND P. "Retardation: Its Significance and Its Measurement." *Educational Review* 38: 122-31; September, 1909.
116. FOSTER, FRANK K. "A Study of Elimination in a Boys' Technical-Vocational High School." *School Review* 36: 58-66; January, 1928.
117. FRAZEE, LAURA. "Standards of Promotion for Primary Grades." *Baltimore Bulletin of Education* 9: 79-85; December, 1930.
118. FRITZ, RALPH A. *An Evaluation of Two Special Purposes of Junior High School: Economy of Time and Bridging the Gap*. University of Iowa Studies in Education, Vol. 4, No. 5. Iowa City: the University, 1927. 80 p.
119. GILBERT, HARRY HOWARD. "High-School Students' Opinions on Reasons for Failure in High-School Subjects." *Journal of Educational Research* 23: 46-49; January, 1931.
120. GREENE, HARRY A. "The Effects of Annual and Semiannual Promotions as Revealed by Pupil Progress." *American School Board Journal* 78: 67, 86, 89; May, 1929.
121. HANDY, ANSON E. "Admission of Under-Age Pupils." *American School Board Journal* 83: 46; August, 1931.
122. HECK, ARCH O. *Administration of Pupil Personnel*. Boston: Ginn and Co., 1929. 479 p.
123. JESSEN, CARL A. *Requirements for High-School Graduation*. U. S. Dept. of the Interior, Bureau of Education, Bulletin, 1928, No. 21. Washington, D. C.: Government Printing Office, 1928. 24 p.
124. JONES, BURR F. "School Progress of Children Unable To Speak English on Entering School." *Elementary School Journal* 27: 674-81; May, 1927.
125. JONES, VERNON A. "Application of Two Techniques in Evaluating Some Policies of Dealing with Bright Children. Part I." *Teachers College Record* 27: 824-32; May, 1926.
126. KAULFERS, W. V. "Intelligence and Spanish Failures." *Modern Language Journal* 13: 550-53; April, 1929.
127. KEENER, E. E. "Mental Ability of Freshman High-School Pupils." *Journal of Educational Research* 11: 113-22; February, 1925.
128. KEMMERER, W. W. "Effect of Mid-Year Change of Teachers on Pupil's Progress." *Texas Outlook* 14: 45; September, 1930.
129. KLENE, VIVIAN, and BRANSON, ERNEST P. "Trial Promotion versus Failure." *Educational Research Bulletin (Los Angeles City Schools)* 8: 6-11; January, 1929.
130. KNIGHT, JAMES, and MANUEL, H. T. "Age of School Entrance and Subsequent School Record." *School and Society* 32: 24-26; July 5, 1930.
131. KOOS, LEONARD V. *The American Secondary School*. Boston: Ginn and Co., 1927. p. 114-49.
132. KRAMER, GRACE A. "The Relation of the Testing Program to Promotion." *Baltimore Bulletin of Education* 9: 73-78; December, 1930.
133. LAMSON, EDNA EMMA. *A Study of Young Gifted Children in Senior High School*. Contributions to Education, No. 424. New York: Teachers College, Columbia University, 1930. 117 p.
134. LINCOLN, EDWARD A. "The Later Performance of Under-Aged Children Admitted to School on the Basis of Mental Age." *Journal of Educational Research* 19: 22-30; January, 1929.
135. LUCKY, LEWIS BRIDGER. *An Analysis of Various Methods of Calculating Retardation in the Elementary Grades*. Unpublished master's thesis, University of Texas, 1929. 114 p.

136. McELWEE, EDNA WILLIS. "A Study of Retardation and Special Instruction in Reading." *Elementary School Journal* 32: 135-43; October, 1931.
137. MCKINNEY, H. T. *Promotion of Pupils, a Problem in Educational Administration*. Unpublished doctor's thesis, University of Illinois, 1928. 180 p.
138. MACLATCHY, JOSEPHINE H. *Attendance at Kindergarten and Progress in the Primary Grades*. Bureau of Educational Research Monographs, No. 8. Columbus: Ohio State University Press, 1928. 144 p.
139. MADDOCKS, CARL W. "The Factor of Intelligence in School Failures." *School Review* 35: 602-11; October, 1927.
140. MADSEN, I. N. "High School Students' Intelligence Ratings According to the Army Alpha Test." *School and Society* 11: 298-300; March 6, 1920.
141. MANUEL, HERSCHEL T. *The Education of Mexican- and Spanish-speaking Children in Texas*. Austin, Tex.: Fund for Research in the Social Sciences, University of Texas, 1930. 173 p.
142. MILLER, JOSEPH. "Causes of Failure and Success in School." *Educational Method* 10: 327-33; March, 1931.
143. NATIONAL EDUCATION ASSOCIATION, DEPARTMENT OF SUPERINTENDENCE. "The Articulation of the Units of American Education." *Seventh Yearbook*. Washington, D. C.: the Association, 1929. 616 p.
144. NATIONAL EDUCATION ASSOCIATION, DEPARTMENT OF SUPERINTENDENCE. "Five Unifying Factors in American Education." *Ninth Yearbook*. Washington, D. C.: the Association, 1931. 543 p.
145. OBRIEN, FRANCIS PAUL. *The High School Failures*. Contributions to Education, No. 102. New York: Teachers College, Columbia University, 1919. 97 p.
146. O'SHEA, WILLIAM J. *Thirty-first Annual Report of the Superintendent of Schools, for the Year Ending July 31, 1929*. New York: Board of Education, 1930. p. 559-66.
147. PHILLIPS, FRANK M. *Statistical Summary of Education, 1927-28*. U. S. Dept. of the Interior, Office of Education, Bulletin, 1930, No. 3. Washington, D. C.: Government Printing Office, 1930. 16 p.
148. PYLE, W. H. "A Psychological Study of Some High-School Failures." *School and Society* 31: 819-20; June 14, 1930.
149. RANKIN, PAUL T., director. *The Effect of Kindergarten Attendance upon Progress and Quality of Work in the Grades*. Detroit Educational Bulletin, Research Bulletin, No. 10. Detroit: Board of Education, November, 1925. p. 17-48.
150. REED, MARY M. *An Investigation of Practices in First Grade Admission and Promotion*. Contributions to Education, No. 290. New York: Teachers College, Columbia University, 1927. 136 p.
151. ROE, WARREN A. "A Quantitative Study of Promotion Progress of Pupils." *Educational Method* 10: 259-67; February, 1931.
152. ROGERS, DON C. "A Study of Pupil Failures and Subject Failures in Chicago." *Journal of Educational Research* 14: 247-55; November, 1926.
153. SELIS, MORRIS J. "Transfers in the Public Schools: The Effect of Transfer on School Progress." *Elementary School Journal* 27: 377-86; January, 1927.
154. SMITH, HENRY LESTER, compiler. *Topical Analysis of 234 School Surveys*. Indiana University, School of Education Bulletin, Vol. 3, No. 4. Bloomington, Ind.: the University, 1927. 111 p.
155. SOTH, M. R. "A Study of a Pupil Retarded in Arithmetic." *Elementary School Journal* 29: 439-42; February, 1929.
156. STETSON, PAUL C. "A Suggested Reorganization To Improve Articulation and Promotion." *American School Board Journal* 82: 40, 127; May, 1931.
157. STRAYER, GEORGE D. *Age and Grade Census of Schools and Colleges*. U. S. Dept. of the Interior, Bureau of Education, Bulletin, 1911, No. 5. Washington, D. C.: Government Printing Office, 1911. 144 p.
158. STRAYER, GEORGE D., and ENGELHARDT, N. L. *The Classroom Teacher at Work in American Schools*. New York: American Book Co., 1920. p. 126-27.
159. "Study of Chronic Failures in the High Schools of Denver." *School Review* 39: 161-65; March, 1931.
160. TAYLOR, DOUGLAS BARNES. *Negro Education in Texas*. Unpublished master's thesis, University of Texas, 1927. 121 p.
161. TERMAN, LEWIS M. *The Intelligence of School Children*. Boston: Houghton Mifflin Co., 1919. 317 p.

162. THORNDIKE, EDWARD L. *The Elimination of Pupils from School*. U. S. Dept. of the Interior, Bureau of Education, Bulletin, 1907, No. 4. Washington, D. C.: Government Printing Office, 1908. 63 p.
163. THORNDIKE, EDWARD L. "Promotion, Retardation, and Elimination." *Psychological Clinic* 3: 232-40; 255-65; January 15, February 15, 1910.
164. U. S. DEPARTMENT OF THE INTERIOR, BUREAU OF EDUCATION. *Biennial Survey of Education, 1916-18*. Vol. 3. Bulletin, 1919, No. 90. Washington, D. C.: Government Printing Office, 1921. p. 77-85.
165. U. S. DEPARTMENT OF THE INTERIOR, OFFICE OF EDUCATION. *Bibliography of Research Studies in Education, 1929-30*. Bulletin, 1931, No. 13. Washington, D. C.: Government Printing Office, 1931. 475 p.
166. U. S. DEPARTMENT OF THE INTERIOR, OFFICE OF EDUCATION. *Recent Theses in Education*. Pamphlet, No. 26. Washington, D. C.: Government Printing Office, 1931. 41 p.
167. VAN COTT, H. H. "Some Definite Rules for Determining Promotion Grades and Practices." *Junior-Senior High School Clearing House* 5: 546; May, 1931.
168. VAN DENBURG, JOSEPH KING. *Causes of the Elimination of Students in Public Secondary Schools of New York City*. Contributions to Education, No. 47. New York: Teachers College, Columbia University, 1911. 207 p.
169. VOLKMER, HILDA, and NOBLE, ISABEL. "Retardation as Indicated by One Hundred City School Reports." *Psychological Clinic* 8: 75-81; May 15, 1914.
170. WARNER, M. LAVINIA. "Eugene, a Brilliant Boy Who Failed in School." *Psychological Clinic* 19: 143-55; October, 1930.
171. WILCOX, ALFRED CHURCHILL. *A Study of the Relative Progress Made in an American School by Pupils Representing Various European Nationalities*. Unpublished master's thesis, State University of Iowa, 1927. 50 p.
172. WITMER, LIGHTNER. "What Is Meant by Retardation?" *Psychological Clinic* 4: 121-31; October 15, 1910.
173. WOOLLEY, HELEN THOMPSON, and FERRIS, ELIZABETH. *Diagnosis and Treatment of Young School Failures*. U. S. Dept. of the Interior, Bureau of Education, Bulletin, 1923, No. 1. Washington, D. C.: Government Printing Office, 1923. 115 p.

Chapter III. School Marks

174. ABELL, E. L. "Grading from the Median." *Journal of Educational Research* 18: 425-28; December, 1928.
175. ASHBAUGH, E. J. "Reducing the Variability in Teachers' Marks." *Journal of Educational Research* 9: 185-98; March, 1924.
176. AYER, FRED C., and VOTAW, D. F. "Taking the Guess out of Grading." *American School Board Journal* 83: 35, 90; October, 1931.
177. CAHOON, G. P. "Minimizing the Subjective Element in Marking." *University High School Journal (University of California)* 11: 143-55; December, 1931.
178. CAMP, FREDERICK S. "Some 'Marks': An Administrative Problem." *School Review* 25: 697-713; December, 1917.
179. CHARLES, JOHN W. "Competition for Marks." *Journal of Applied Psychology* 16: 315-21; June, 1932.
180. CONNOR, WILLIAM L. "The Relation between Teachers' Marks and Pupils' Behavior." *Nation's Schools* 4: 55-60; November, 1929.
181. COREY, STEPHEN MAXWELL. "Use of the Normal Curve as a Basis for Assigning Grades in Small Classes." *School and Society* 31: 514-16; April 12, 1930.
182. CURTIS, FRANCIS D., and WOODS, GERALD G. "A Study of the Relative Teaching Values of Four Common Practices in Correcting Examination Papers." *School Review* 37: 615-23; October, 1929.
183. DAVIS, J. DEWITT. "The Effect of the 6-22-44-22-6 Normal Curve System on Failures and Grade Values." *Journal of Educational Psychology* 22: 636-40; November, 1931.
184. DEARBORN, W. F. *School and University Grades*. University of Wisconsin Bulletin, No. 368, High School Series, No. 9. Madison, Wis.: the University, 1910. 59 p.
185. DOSTAL, JOSEPH. "A Practical and Simple Scheme for Grading Pupils." *American School Board Journal* 79: 138; November, 1929.

186. ELLIS, ROBERT SIDNEY. *Standardizing Teachers' Examinations and the Distribution of Class Marks*. Bloomington, Ill.: Public School Publishing Co., 1927. 170 p.
187. FINKELSTEIN, I. E. *The Marking System in Theory and Practice*. Educational Psychology Monographs, No. 10. Baltimore: Warwick and York, 1913. 88 p.
188. FITTS, CHARLES A. "Why Did My Boy Get Such a Low Mark?" *Journal of Educational Method* 8: 151-54; December, 1928.
189. FOSTER, H. H. "How Can Pupils Be Marked More Fairly?" *American School Board Journal* 83: 49-51, 92; December, 1931.
190. GILKEY, ROYAL. "The Relation of Success in Certain Subjects in High School to Success in the Same Subjects in College." *School Review* 37: 576-88; October, 1929.
191. GOOD, CARTER V. *Teaching in College and University*. Baltimore: Warwick and York, 1929. Chapter 7, "Measurement and Guidance in Higher Education," p. 256-339.
192. GOODRICH, T. V. "Can Pupils Mark Their Own Papers Accurately?" *Journal of Educational Research* 21: 255-61; April, 1930.
193. GORDON, GEORGE. "The Relation of the Pupils' Intelligence Quotients to Their Grades in the High-School Shops." *Industrial Education Magazine* 30: 249-50; January, 1929.
194. GORSLINE, ROBERT. "An Experiment with a Plus-and-Minus System of Marking." *School Review* 39: 61-63; January, 1931.
195. GRAY, C. T. *Variations in the Grades of High School Pupils*. Educational Psychology Monographs, No. 8. Baltimore: Warwick and York, 1913. 120 p.
196. HAGER, CARL J. "Systematic Method of Grading Shop Projects." *Industrial Arts Magazine* 18: 376-78; October, 1929.
197. HECK, ARCH O. *Administration of Pupil Personnel*. Boston: Ginn and Co., 1929. Chapter 18, "School Marks," p. 385-412.
198. HEILMAN, J. D. "The Reliability of College Teachers' Classroom Tests." *Educational Administration and Supervision* 17: 535-43; October, 1931.
199. HENDRICKSON, CARL E. "School Marks at Van Nuys High School." *Educational Research Bulletin (Los Angeles City Schools)* 7: 8-9; December, 1927.
200. HILL, ROY W. "The Problem of Transferring Marks." *School Executives Magazine* 49: 516-17; July, 1930.
201. HOLY, T. C. "A Weighting Scheme for Freshman Grades." *Educational Research Bulletin (Ohio State University)* 8: 77-81; February 20, 1929.
202. HUGHES, W. HARDIN. "Analyzing the Ingredients of Teachers' Marks." *Nation's Schools* 6: 21-25; December, 1930.
203. HULTEN, C. E. "The Personal Element in Teachers' Marks." *Journal of Educational Research* 12: 49-55; June, 1925.
204. INGLIS, ALEXANDER. "Variability of Judgments in Equating Values in Grading." *Educational Administration and Supervision* 2: 25-30; January, 1916.
205. JOHNSON, FRANKLIN W. *The Administration and Supervision of the High School*. Boston: Ginn and Co., 1925. Chapter 15, "The Marking System," p. 279-302.
206. JOHNSON, FRANKLIN W. "A Study of High-School Grades." *School Review* 19: 13-24; January, 1911.
207. JOHNSTON, J. B. "The Prediction of Student Scholarship." *Problems of College Education*. (Edited by Earl Hudelson). Minneapolis, Minn.: University of Minnesota Press, 1928. p. 232-38.
208. KELLY, FREDERICK J. *Teachers' Marks, Their Variability and Standardization*. Contributions to Education, No. 66. New York: Teachers College, Columbia University, 1914. 139 p.
- ✓ 209. LAUTERBACH, CHARLES E. "Some Factors Affecting Teachers' Marks." *Journal of Educational Psychology* 19: 266-71; April, 1928.
- ✓ 210. LENTZ, T. F. "Sex Differences in School Marks with Achievement Test Scores Constant." *School and Society* 29: 65-68; January 12, 1929.
211. MCCORMICK, THOMAS C. "Precautions and Procedure in Normal Grading." *School and Society* 35: 298-99; February 27, 1932.
212. MASTERS, H. G. "Standards for Rating Pupils." *Journal of Educational Method* 1: 176-77; January, 1922.
213. MATTHEWS, R. D. "Use of the Standard Deviation Value in Improving Teachers' Marks and in Diagnosis." *Educational Outlook* 6: 90-96; January, 1932.

214. MESSICK, C. M. *Report Cards: An Essential Feature of the School System Today*. Unpublished master's thesis, University of Texas, 1930. 93 p.
215. MEYER, M. F. "Experiences with the Grading System of the University of Missouri." *Science* 33: 661-67; April 28, 1911.
216. MEYER, M. F. "The Grading of Students." *Science* 28: 243-50; August 21, 1908.
217. MILLER, W. S. "College Marks." *Problems of College Education*. (Edited by Earl Hudelson). Minneapolis, Minn.: University of Minnesota Press, 1928. p. 287-301.
218. MORTON, R. L. "The Influence of Pupil Conduct on Teachers' Marks." *Educational Research Bulletin (Ohio State University)* 11: 57-60; February 3, 1932.
219. NEWKIRK, LOUIS V. "Reliability of Shop Teachers' Marks." *Industrial Arts and Vocational Education* 20: 123-26; April, 1931.
220. NICOL, CARL C. W. "Ranking System." *Journal of Higher Education* 3: 21-25; January, 1932.
221. ODELL, C. W. *Predicting the Scholastic Success of College Freshmen*. University of Illinois Bulletin, Vol. 25, No. 2, Educational Research Bulletin No. 37. Urbana, Ill.: the University, 1927. 54 p.
222. ODELL, C. W. *A Selected Annotated Bibliography Dealing with Examinations and School Marks*. University of Illinois Bulletin, Vol. 26, No. 20, Educational Research Bulletin, No. 43. Urbana, Ill.: the University, 1929. 42 p.
223. ODELL, C. W. *Traditional Examinations and New Type Tests*. New York: Century Co., 1928. 469 p.
224. POTTHOFF, E. F., and BARNETT, N. E. "Comparison of Marks Based upon Weighted and Unweighted Items in a New-Type Examination." *Journal of Educational Psychology* 23: 92-98; February, 1932.
225. REEDER, JOHN C. "The Genesee Scale of Qualities." *Elementary School Journal* 20: 292-96; December, 1919.
226. RUCH, G. M. *The Objective or New-Type Examination*. Chicago: Scott, Foresman, and Co., 1929. 478 p.
227. RUGG, HAROLD O. *A Primer of Graphics and Statistics for Teachers*. Boston: Houghton Mifflin Co., 1925. Chapter 6, "The Teachers' Use of Statistical Distributions in Giving School Marks," p. 65-82.
228. RUGG, HAROLD O. "Teachers' Marks and the Reconstruction of the Marking System." *Elementary School Journal* 18: 701-19; May, 1918.
229. SHEPHERD, EVERETT M. "The Effect of the Quality of Penmanship on Grades." *Journal of Educational Research* 19: 102-5; February, 1929.
230. SIMS, V. M., and SCHULTZ, M. F. "Relative Validity of Three Measures of Student Achievement." *Journal of Educational Research* 25: 278-85; April, 1932.
231. STARCH, DANIEL. *Educational Psychology*. Rev. ed. New York: Macmillan Co., 1927. Chapter 23, "Marks as Measures of School Work," p. 512-36.
232. STARCH, DANIEL, and ELLIOTT, EDWARD C. "Reliability of the Grading of High-School Work in English." *School Review* 20: 442-57; September, 1912.
233. STEINWAY, LOUISE S. "Recording Success of Children." *Educational Method* 8: 459-68; May, 1929.
234. STODDARD, GEORGE D. "The Use of Quantitative Measurement in Inducting the Student into the Institution of Higher Learning and in Predicting His Academic Success." *Quantitative Measurement in Institutions of Higher Learning*. Eighteenth Yearbook. National Society for College Teachers of Education. Chicago: University of Chicago Press, 1930. Chapter 4, p. 88-120.
235. STRUTHERS, ALICE BALL. "Grades and Grading Systems." *California Quarterly of Secondary Education* 8: 33-38; October, 1932.
236. SUMNER, FRANCIS CECIL. "Marks as Estimated by Students." *Education* 52: 429; March, 1932.
237. TAYLOR, HOWARD R., and CONSTANCE, CLIFFORD L. "How Reliable Are College Marks?" *Research in Higher Education*. U. S. Dept. of the Interior, Office of Education, Bulletin, 1931, No. 12. Washington, D. C.: Government Printing Office, 1931. p. 5-14.
238. TRABUE, M. R. *Measuring Results in Education*. New York: American Book Co., 1924. Chapter 2, "School Marks and Pupil Report Cards," p. 34-59.
239. TRABUE, M. R. "Reports of Teachers to Parents." *Research Bulletin* 5: 267-73, 338-40; November, 1927. Washington, D. C.: Research Division, National Education Association.

240. WALLIS, B. C. "The Efficiency of Competitive Scholarship Examinations of Young Children, with Particular Reference to the Effect of an Age Allowance." *Forum of Education* 8: 130-34; June, 1930.
241. WELD, LEROY D. "A Standard of Interpretation of Numerical Grades." *School Review* 25: 412-21; June, 1917.
242. WHITTEN, C. W., chairman. "Report on Standardizing Teachers' Marks." *Sixth Yearbook*. Berwyn, Ill.: National Association of Secondary-School Principals (H. V. Church, sec.), 1922. p. 183-202.
243. WOOD, BEN D. *Measurement in Higher Education*. Yonkers-on-Hudson, N. Y.: World Book Co., 1923. 337 p.
244. WRIGHT, FRANK L. "The Distribution of Teachers' Marks in Teacher-Training Institutions." *Educational Administration and Supervision* 10: 605-16; December, 1924.

Chapter IV. Recording and Reporting

245. AMERICAN ASSOCIATION OF COLLEGIATE REGISTRARS. "Report on a Personnel System for the Sheffield Scientific School Submitted to the Faculty of the School February 25, 1925." *Bulletin of the American Association of Collegiate Registrars* 1: 318-29; January, 1926.
246. AMERICAN HOSPITAL ASSOCIATION, COMMITTEE ON ACCOUNTING AND RECORDS. "Fifth Report, 1926." *Bulletin of the American Hospital Association* 7: 3-48; September, 1926.
247. AMERICAN PSYCHIATRIC ASSOCIATION AND THE NATIONAL COMMITTEE FOR MENTAL HYGIENE. *Statistical Manual for the Use of Hospitals for Mental Diseases*. 4th ed. rev. Albany, N. Y.: Boyd Printing Co., 1927.
248. AMERICAN PUBLIC HEALTH ASSOCIATION, COMMITTEE ON ADMINISTRATIVE PRACTICE. *Appraisal Form for City Health Work*. 3d ed. rev. New York: American Public Health Association, 1929. 107 p.
249. AYER, FRED C. *The Progress of Pupils in the State of Texas*. Research Bulletin of the Section of Superintendence, Texas State Teachers Association. Austin, Tex.: the Author, 1932. 35 p.
250. BERMEJO, F. V. "The Permanent, Continuing School Census." *American School Board Journal* 65: 43-44; December, 1922.
251. BINGHAM, WALTER VAN DYKE, and MOORE, BRUCE VICTOR. *How To Interview*. New York: Harper and Brothers, 1931. 320 p.
252. BINGHAM, WALTER VAN DYKE. "Placement Service in American Colleges and Universities." *Report of the Third Annual Meeting*. Washington, D. C.: National Association of Appointment Secretaries, 1926. p. 14-25.
253. BIRKELO, C. P. "A Complete Census, Its Function and Value." *American School Board Journal* 65: 76; November, 1922.
254. BROLYER, CECIL. *Fifth Annual Report of the Commission on Scholastic Aptitude Tests*. New York: College Entrance Examination Board, 1930. "Persistence of Individual Idiosyncrasy," p. 21-26.
255. BROOKS, S. S. *Brooks Individual Graph Record Card*. Cambridge, Mass.: J. L. Hammett Co.
- ✓ 256. BROOKS, S. S. "The Graphic Interpretation of Test Scores." *Educational Research Bulletin (Ohio State University)* 4: 366-71; November 18, 1925.
- ✓ 257. BROTEMARKLE, R. A. "The Analytical Study of the Student Personnel Problem." *Journal of Applied Psychology* 11: 415-36; December, 1927. 12: 1-42; February, 1928.
258. BURR, SAMUEL ENGLE. "What Is Gained by Designing Your Own Report Cards." *Nation's Schools* 10: 44-46; November, 1932.
259. CARNEGIE FOUNDATION FOR THE ADVANCEMENT OF TEACHING. "A Cumulative Study through College of Students Who Graduated from High School in 1928." *Study of Relations of Secondary and Higher Education in Pennsylvania*. New York: the Foundation, 1928. 8 p.
260. CARNEGIE FOUNDATION FOR THE ADVANCEMENT OF TEACHING. *Program for a Study of the Relations of Secondary and Higher Education*. Abstract of a Report to the Joint Commission of the Association of College Presidents and of the State De-

- partment of Public Instruction in the State of Pennsylvania. New York: the Foundation, 1928. 17 p.
261. CARNEGIE INSTITUTE OF TECHNOLOGY. *Twenty-five Years of Personnel and Placement Work at the Carnegie Institute of Technology*. Bulletin, February 1, 1931. Pittsburgh, Pa.: Carnegie Institute of Technology, 1931.
 262. CHAPMAN, H. B., and ASHBAUGH, E. J. "Report Cards in American Cities." *Educational Research Bulletin (Ohio State University)* 4: 289-93; October 7, 1925.
 263. CHAPMAN, H. B., and ASHBAUGH, E. J. "Suggestions for Pupils' Report Cards." *Educational Research Bulletin (Ohio State University)* 4: 293-98; October 7, 1925.
 264. CLARK, MARY AUGUSTA. *Recording and Reporting in Child Guidance Clinics*. New York: Commonwealth Fund, 1930. 151 p.
 265. "College Personnel Record Cards." *Journal of Personnel Research* 5: 122-23; July, 1926.
 266. DAVIS, JOHN W. "Continuous School Census." *Proceedings, 1920*. Vol. 58. Washington, D. C.: National Education Association, 1920. p. 508-10.
 267. DAVIS, MICHAEL M., and OTHERS. *Clinics, Hospitals and Health Centers*. New York: Harper and Brothers, 1927. Chapter 18, "Records," p. 238-69.
 268. DUBLIN, LOUIS I. *Records of Public Health Nursing*. New York: National Organization for Public Health Nursing, 1922. 51 p.
 269. DUNN, HALBERT L. "Application of Statistical Methods in Physiology." *Physiological Reviews* 9: 275-398; April, 1929.
 270. ELKIND, HENRY B., and DOERING, CARL R. "The Application of Statistical Method to the Study of Mental Disease." *American Journal of Psychiatry* 8: 789-808; March, 1928.
 271. ENGELHARDT, FRED. *Report of the Survey of the Organization, Administration, Finance and Certain Other Aspects of the Public School System, Superior, Wisconsin, School Year, 1924-25*. University of Minnesota Bulletin, Vol. 29, No. 12, Educational Monograph, No. 9. Minneapolis, Minn.: the University, 1926. Chapter 2, "The Administration of the Business Affairs of the City Schools," p. 26-57.
 272. ENGELHARDT, N. L.; GANDERS, H. S.; and RIEFLING, B. JEANNETTE. "Bibliography of School Records and Reports." *Teachers College Record* 26: 765-81; May, 1925.
 273. EVENDEN, EDWARD S. "Routine and Record Factors in Classroom Management." *The Classroom Teacher*. Vol. 1. Chicago: Classroom Teacher (104 S. Michigan Ave.), 1927. p. 173-200.
 274. FOWLKES, JOHN GUY. "Attendance Records and How They Affect the School's Efficiency." *Nation's Schools* 6: 80-86; November, 1930.
 275. FOWLKES, JOHN GUY. "Child Accounting Laws in Ten States and How They Function." *Nation's Schools* 5: 43-46; January, 1930.
 276. GANDERS, HARRY STANLEY. *A System of School Records and Reports for Smaller Cities*. Greeley, Colo.: Colorado State Teachers College, 1926. 191 p.
 277. GOOD, CARTER V. "The Administration and Supervision of Students by Advisors in a Teacher-Training Institution." *Educational Administration and Supervision* 12: 161-69; March, 1926.
 278. GROVER, C. C. "Making Recorded Data Function in Counseling." *Nation's Schools* 6: 29-32; July, 1930.
 279. HALL, CLIFTON W. *Collection and Evaluation of Socio-Economic Indices in Relation to Educational Variables*. Unpublished doctor's thesis, Ohio State University, 1931. 262 p.
 280. HAWKES, H. E., chairman, and OTHERS. *Personnel Methods*. Educational Record Supplement, No. 8. Washington, D. C.: American Council on Education, July, 1928. 68 p.
 281. HECK, ARCH O. *Administration of Pupil Personnel*. Boston: Ginn and Co., 1929. 479 p.
 282. HECK, ARCH O. *A Study of Child-Accounting Records*. Bureau of Educational Research Monographs, No. 2. Columbus: Ohio State University, 1925. 245 p.
 283. HECK, ARCH O., and REEDER, WARD G. *The Uniform School Accounting System*. Bloomington, Ill.: Public School Publishing Co., 1929. 37 p.
 284. HERSEY, REX B. "Individualizing Education in the Wharton School." *Journal of Personnel Research* 5: 31-43; May-June, 1926.

285. HURLIN, RALPH G. "Some Results of Two Years' Study of Family Case Work Statistics." *Proceedings of the National Conference of Social Work at the 55th Annual Session, 1928*. Chicago: University of Chicago Press, 1928. p. 245-57.
286. JONES, ARTHUR J. *Principles of Guidance*. New York: McGraw-Hill Book Co., 1930. 385 p.
287. JONES, EDWARD SAFFORD. *Studies from the Office of Personnel Research*. University of Buffalo Studies, Vol. 8, No. 1. Buffalo, N. Y.: University of Buffalo, 1930. 87 p.
288. JUDD, CHARLES H. "Can High-School Supervision Be Made Scientific?" *School and Society* 27: 341-48; March 24, 1928.
289. KELLY, FREDERICK J. *The American Arts College*. New York: Macmillan Co., 1925. 198 p.
- ✓ 290. KORNHAUSER, ARTHUR W. "A Study of Four Reference Report Forms." *Personnel Journal* 6: 38-46; June, 1927.
- ✓ 291. KUENZEL, MYRA W. "Case-Record System at the Vineland Laboratory." *Training School Bulletin (Vineland, N. J.)* 28: 41-52; May, 1931.
292. LEWIS, ELEANOR F. "Willard Hall: An Experiment in Housing Freshman Women at Northwestern University." *School and Society* 32: 529-32; October 18, 1930.
293. McALLISTER, ABEL J., and OTIS, ARTHUR S. *Child Accounting Practice*. Yonkers-on-Hudson, N. Y.: World Book Co., 1927. 196 p.
294. MAVERICK, LEWIS A. *The Vocational Guidance of College Students*. Harvard Studies in Education, No. 8. Cambridge, Mass.: Harvard University Press, 1926. 251 p.
295. MOEHLMAN, ARTHUR B. *Child Accounting*. Detroit: Friesma Brothers Press, 1924. 205 p.
296. NATIONAL ASSOCIATION FOR THE STUDY OF EPILEPSY, COMMITTEE ON STANDARDIZATION OF STATISTICS. *Statistical Manual for the Use of Institutions for Epileptics*. Sonyea, N. Y.: Craig Colony Press, 1927.
297. NATIONAL COMMITTEE FOR MENTAL HYGIENE, BUREAU OF STATISTICS. *Statistical Manual for the Use of Institutions for the Feeble-minded*. Utica, N. Y.: State Hospitals Press, 1921.
298. NATIONAL EDUCATION ASSOCIATION, DEPARTMENT OF SECONDARY-SCHOOL PRINCIPALS. *Bulletin (Proceedings)* No. 11: 1-260; March, 1926. Berwyn, Ill.: the Department (H. V. Church, sec.).
299. NATIONAL EDUCATION ASSOCIATION, DEPARTMENT OF SUPERINTENDENCE. "Five Unifying Factors in American Education." *Ninth Yearbook*. Washington, D. C.: the Association, 1931. p. 168-75, 178-80.
300. NATIONAL EDUCATION ASSOCIATION, RESEARCH DIVISION. "The Principal Studies His Job." *Research Bulletin* 6: 85-146; March, 1928. Washington, D. C.: the Association. "Research Activities," p. 124-26.
301. NATIONAL EDUCATION ASSOCIATION, RESEARCH DIVISION. "School Records and Reports." *Research Bulletin* 5: 227-346; November, 1927. Washington, D. C.: the Association.
302. O'REAR, F. B. *The Duties of the Registrar*. Springfield, Mo.: Southwest Missouri State Teachers College, 1925. 173 p.
303. PATERSON, DONALD G. "A Program for Student Counseling." *Problems of College Education*. (Edited by Earl Hudelson). Minneapolis, Minn.: University of Minnesota Press, 1928. p. 265-86.
304. PEEL, ARTHUR J. *Simplified School Accounting*. Milwaukee, Wis.: Bruce Publishing Co., 1925. 118 p.
- ✓ 305. PHILLIPS, FRANK M. "Uniformity in Defining, Recording and Reporting Statistical Items." *Journal of the American Statistical Association (Proceedings)* 26: 181-86; March, 1931 (Supplement).
306. PLATT, PHILIP S. *The Validity of the Appraisal Form as a Measure of Administrative Health Practice*. New York: American Public Health Association, 1928. 102 p.
307. "Policies, Regulations, Standards, and Recommendations for Accrediting Secondary Schools." *North Central Association Quarterly* 6: 65-69; June, 1931.
308. POTTER, A. A. "Personnel Work as Applied to a College of Engineering." *Proceedings, 1923*. Lexington, Ky.: Association of Land-Grant Colleges (Thomas Cooper, sec., University of Kentucky), 1924. p. 398-412.
309. REAVIS, W. C., and WOELLNER, ROBERT. "Labor-Saving Devices Used in Office

- Administration in Secondary Schools." *School Review* 36: 736-44; December, 1928.
310. REES, R. I. "College Men in Business." *Bulletin of the Association of American Colleges* 17: 112-18; March, 1931.
 311. ROBERTSON, DAVID ALLAN. "The American Council Cumulative Record Forms for Colleges and Secondary Schools." *Educational Record* 14: 81-93; January, 1933.
 312. SHEEHY, MAURICE S. *Problems of Student Guidance*. Philadelphia: Dolphin Press, 1929. 264 p.
 313. SMITH, LEWIS W. "Counselling and Guidance Problems in the Junior College." *California Quarterly of Secondary Education* 5: 343-48; June, 1930.
 314. STENQUIST, JOHN L. "Better Schools through Better Individual Records of Pupils' Progress." *Baltimore Bulletin of Education* 2: 274-78; 292-95; May, June, 1924 (also printed separately).
 315. STRAYER, GEORGE D., and ENGELHARDT, N. L. *The Classroom Teacher at Work in American Schools*. New York: American Book Co., 1920. Chapter 12, "Records and Reports," p. 273-309.
 316. STRAYER, GEORGE D., and ENGELHARDT, N. L. *School Records and Reports*. New York: Teachers College, Columbia University, 1923. 86 p.
 317. STRAYER, GEORGE D., and ENGELHARDT, N. L. *Strayer-Engelhardt School Record Series*. Albany, N. Y.: C. F. Williams and Son.
 318. SWINK, RAYMOND ANDREW. *The Relative Contributions of Various Personnel Data to the Prediction of College Attainment*. Unpublished master's thesis, Ohio State University, 1928. 87 p.
 319. TATTERSHALL, LOUISE M., compiler. "Current Reports on Public Health Nursing." *Public Health Nurse* 20: 587-92; November, 1928.
 320. THISTED, MOSES N., and JONES, LONZO. "A Critical Analysis of the Personal Information Blank in Use at the State University of Iowa." *School and Society* 33: 540-44; April 18, 1931.
 321. THOMAS, DOROTHY SWAINE. "Statistics in Social Research." *American Journal of Sociology* 35: 1-17; July, 1929.
 322. THURSTONE, L. L., and MANN, CHARLES R. "Vocational Guidance for College Students." *Journal of Personnel Research* 3: 421-48; April, 1925.
 323. TOOPS, HERBERT A. "Evaluating the Successive Steps of a Student's Academic Progress." *Vocational Guidance Magazine* 5: 49-56; November, 1926.
 324. TOOPS, HERBERT A. "An Individual Educational Guidance Card for College Students." *School and Society* 20: 125-28; July 26, 1924.
 325. TOOPS, HERBERT A. *Questionnaires, Standard Codes and Hollerith Machines*. Columbus, Ohio: the Author (Ohio State University). 1000 p. (MS.).
 326. TOOPS, HERBERT A. "Some Considerations Relative to the Standardization of Certain Procedures in Educational Research." To appear in *Journal of Experimental Education*, March, 1933.
 327. TOOPS, HERBERT A. "The Technique of Vocational Guidance as Investigated by the Institute of Educational Research." *National Vocational Guidance Association Bulletin* 1: 86-93; January, 1923.
 328. U. S. DEPARTMENT OF COMMERCE, BUREAU OF THE CENSUS. *Instructions for Compiling Criminal Statistics; a Manual for the Use of Penal Institutions, Police Departments, Courts, Prosecutors and Parole and Probation Agencies*. Washington, D. C.: Government Printing Office, 1927. 64 p.
 329. U. S. DEPARTMENT OF LABOR, CHILDREN'S BUREAU. *Juvenile Court Statistics; a Tentative Plan for Uniform Reporting of Statistics of Delinquency, Dependency, and Neglect*. Bureau Publication, No. 159. Washington, D. C.: Government Printing Office, 1926. 37 p.
 330. WEST, RODNEY M. "Student Mortality, Student Survival, and Student Accounting." *Problems of College Education*. (Edited by Earl Hudelson). Minneapolis, Minn.: University of Minnesota Press, 1928. p. 199-209.
 331. WOOD, BEN D. "The College Curriculum and Vocational Guidance." *School and Society* 21: 508-12; April 25, 1925. Also in: *Association of American Colleges Bulletin* 11: 209-19; May, 1925.
 332. WOOD, BEN D. "Cumulative Personnel Records." *Secretarial Notes for the Eleventh Annual Conference*. 1929. Akron, Ohio: National Association of Deans and Advisors of Men (Don H. Gardner, sec., University of Akron), 1929, p. 42-48.
 333. WOOD, BEN D. "Relation of College Curricula to Educational and Vocational Guidance." *School Life* 10: 127-29; March, 1925.

Chapter V. Characteristics of Pupil Population

334. ALLEN, C. N. "Recent Studies in Sex Differences." *Psychological Bulletin* 27: 394-407; May, 1930.
335. ALLEN, C. N. "Studies in Sex Differences." *Psychological Bulletin* 24: 294-304; May, 1927.
336. ALLPORT, GORDON W. "What Is a Trait of Personality?" *Journal of Abnormal and Social Psychology* 25: 368-72; January-March, 1931.
337. ANDERSON, JOHN E., and GOODENOUGH, FLORENCE L. *How Normal Children Grow*. New York: Parents Magazine, 1930. 28 p.
338. BAKER, HARRY J., chairman, and OTHERS. "Tests of Intelligence and Aptitude." *Review of Educational Research* 2: 271-342; October, 1932. Washington, D. C.: American Educational Research Association, a department of the National Education Association.
339. BARNARD, BERENICE. "An Experiment in Testing Music Capacity." *Music Supervisors Journal* 18: 54-56; May, 1932.
340. BIERRING, E. *The Standard Metabolism of Boys (7 to 18 Years Inclusive)*. Copenhagen: Levin and Munksgaard, 1931. 150 p.
341. BOOK, WILLIAM F. *The Intelligence of High School Seniors*. New York: Macmillan Co., 1922. 371 p.
342. BOOK, WILLIAM F., and MEADOWS, JOHN L. "Sex Differences in 5925 High School Seniors in Ten Psychological Tests." *Journal of Applied Psychology* 12: 56-81; February, 1928.
343. BURKS, BARBARA STODDARD; JENSEN, DORTHA WILLIAMS; and TERMAN, LEWIS M. *The Promise of Youth*. Genetic Studies of Genius, Vol. 3. Stanford University, Calif.: Stanford University Press, 1930. p. 1-20, 472-74.
- ✓ 344. COLLINS, J. E. "The Intelligence of School Children and Paternal Occupation." *Journal of Educational Research* 17: 157-69; March, 1928.
345. COLVIN, STEPHEN S., and MACPHAIL, ANDREW H. *Intelligence of Seniors in the High Schools of Massachusetts*. U. S. Dept. of the Interior, Bureau of Education, Bulletin, 1924, No. 9. Washington, D. C.: Government Printing Office, 1924. 39 p.
346. COX, CATHARINE MORRIS. *The Early Mental Traits of Three Hundred Geniuses*. Genetic Studies of Genius, Vol. 2. Stanford University, Calif.: Stanford University Press, 1926. 842 p.
347. COX, JOHN W. *Mechanical Aptitude*. London: Methuen and Co., 1928. 209 p.
348. CROCKETT, ALEXANDER C. "A Measure of Manual Ability." *Journal of Applied Psychology* 14: 414-26; October, 1930.
349. DAVIS, ROBERT A. *Mentality of Orphans*. Boston: Richard G. Badger, 1930. 182 p.
350. DUNLAP, JACK W. *Race Differences in the Organization of Numerical and Verbal Abilities*. Archives of Psychology, No. 124. New York: Columbia University, 1931. 71 p.
351. EELLS, WALTER CROSBY, and FOX, C. S. "Sex Differences in Mathematical Achievement of Junior College Students." *Journal of Educational Psychology* 23: 381-86; May, 1932.
352. EURICH, ALVIN CHRISTIAN. *Reading Abilities of College Students; an Experimental Study*. Minneapolis, Minn.: University of Minnesota Press, 1931. 208 p.
353. FARNSWORTH, P. R. *An Historical, Critical and Experimental Study of the Seashore-Kwalwasser Test Battery*. Genetic Psychology Monographs, Vol. 9, No. 5. Worcester, Mass.: Clark University Press, 1931. p. 291-393.
354. FISH, LOUIS J. *Examinations Seventy-Five Years Ago and Today*. Yonkers-on-Hudson, N. Y.: World Book Co., 1930. 29 p.
355. FRANZEN, RAYMOND HUGH. *Health Education Tests*. School Health Research Monographs, No. 1. New York: American Child Health Association, 1929. 70 p.
356. FRANZEN, RAYMOND HUGH. *Influence of Social and Economic Factors on the Health of the School Child*. School Health Research Monographs, No. 4. New York: American Child Health Association, 1932. 144 p.
357. FRANZEN, RAYMOND HUGH. *Physical Measures of Growth and Nutrition*. School Health Research Monographs, No. 2. New York: American Child Health Association, 1929. 138 p.

358. FRANZEN, RAYMOND HUGH. *Public Health Aspects of Dental Decay in Children*. School Health Research Monographs, No. 3. New York: American Child Health Association, 1930. 121 p.
359. GARTH, THOMAS R. *Race Psychology*. New York: McGraw-Hill Book Co., 1931. 260 p.
360. GARTH, THOMAS R. "A Review of Race Psychology." *Psychological Bulletin* 27: 329-56; May, 1930.
361. GERBERICH, JOSEPH RAYMOND. *A Personnel Study of 10,000 Iowa High School Seniors*. University of Iowa Studies in Education, Vol. 5, No. 3. Iowa City: the University, 1930. 112 p.
362. GESELL, ARNOLD LUCIUS. *Infancy and Human Growth*. New York: Macmillan Co., 1928. 418 p.
363. GOODENOUGH, FLORENCE L. "The Consistency of Sex Differences in Mental Traits at Various Ages." *Psychological Review* 34: 440-62; November, 1927.
364. GRAHAM, JAMES L. "A Quantitative Comparison of Certain Mental Traits of Negro and White College Students." *Journal of Social Psychology* 1: 267-85; May, 1930.
365. GRANDPREY, MEDORA B. "The Determination of the Musical Capacities of Young Children." *Music Supervisors Journal* 18: 36, 38, 40; October, 1931.
366. HARTSHORNE, HUGH; MAY, MARK A.; and MALLER, JULIUS B. *Studies in Service and Self-Control*. New York: Macmillan Co., 1929. 559 p.
367. HARTSHORNE, HUGH; MAY, MARK A.; and SHUTTLEWORTH, FRANK K. *Studies in the Organization of Character*. New York: Macmillan Co., 1930. 503 p.
368. HENMON, V. A. C., and HOLT, F. O. *A Report on the Administration of Scholastic Aptitude Tests to 34,000 High School Seniors in Wisconsin in 1929 and 1930*. University of Wisconsin Bulletin, Serial No. 1786, General Series, No. 1570. Madison, Wis.: the University, 1931. 104 p.
369. HOLLAND, A. C. "Some Relations between Ability and Vocation." *High School Journal* 7: 10-14; January, 1924.
370. HOLLINGWORTH, LETA S. "Do Intellectually Gifted Children Grow Toward Mediocrity in Stature?" *Pedagogical Seminary and Journal of Genetic Psychology* 37: 345-60; September, 1930.
371. JOHNSTON, J. B., chairman, and OTHERS. "The 1932 College Sophomore Testing Program." *Educational Record* 13: 290-343; October, 1932.
372. JONES, VERNON, and CROOK, MASON. "Educational Tests." *Psychological Bulletin* 29: 120-46; February, 1932.
373. KWALWASSEN, JACOB. "Tests and Measurements in Music." *Psychological Bulletin* 25: 284-301; May, 1928.
374. LABY, J. M. "Etalonnage du Test d'Habileté Mécanique de Stenquist." *Bulletin de L'Institut National d'Orientation Professionnelle* 3: 121-35; March, 1931.
375. LINCOLN, EDWARD A. *Sex Differences in the Growth of American School Children*. Baltimore: Warwick and York, 1927. 189 p.
376. LUH, C. W., and WU, T. M. "A Comparative Study of the Intelligence of Chinese Children on the Pintner Performance and the Binet Tests." *Journal of Social Psychology* 2: 402-8; August, 1931.
377. LUND, FREDERICK HANSEN. "Sex Differences in Type of Educational Mastery." *Journal of Educational Psychology* 23: 321-30; May, 1932.
378. MACQUARRIE, T. W. "A Mechanical Ability Test." *Journal of Personnel Research* 5: 329-37; January, 1927.
379. MANN, G. W. "Selective Influence of Desire to Attend College." *High School Journal* 7: 8-9; January, 1924.
380. MAY, MARK A.; HARTSHORNE, HUGH; and WELTY, RUTH E. "Personality and Character Tests." *Psychological Bulletin* 26: 418-44; July, 1929.
381. MILES, WALTER R. "Measures of Certain Human Abilities throughout the Life Span." *Proceedings of the National Academy of Sciences* 17: 627-33; December, 1931.
382. MURSELL, JAMES L. "Psychology of Music." *Psychological Bulletin* 29: 218-41; March, 1932.
383. NEWLAND, T. ERNEST, and TOOPS, HERBERT A. "A Selected Bibliography on Quantitative Measurement in Higher Education." *Quantitative Measurement in Institutions of Higher Learning*. Eighteenth Yearbook. National Society of College Teachers of Education. Chicago: University of Chicago Press, 1930. Chapter 9, p. 190-231.

384. ODELL, W. *Conservation of Intelligence in Illinois High Schools*. University of Illinois Bulletin, Vol. 22, No. 25, Educational Research Bulletin, No. 22. Urbana, Ill.: the University, 1925. 55 p.
385. PATERSON, DONALD G., and OTHERS. *Minnesota Mechanical Ability Tests*. Minneapolis, Minn.: University of Minnesota Press, 1930. 586 p.
386. PETERSON, JOSEPH. "Comparison of White and Negro Children in the Rational Learning Test." *Nature and Nurture; Their Influence upon Intelligence*. Twenty-seventh Yearbook, Part 1. National Society for the Study of Education. Bloomington, Ill.: Public School Publishing Co., 1928. Chapter 13, p. 333-41.
387. PINTNER, RUDOLPH. "Intelligence Tests." *Psychological Bulletin* 23: 366-81; July, 1926. 24: 391-408; July, 1927. 26: 381-96; July, 1929. 27: 431-57; July, 1930. 29: 93-119; February, 1932.
388. RUCH, G. M. *A Mental-Educational Survey of 1550 Iowa High School Seniors*. University of Iowa Studies in Education, Vol. 2, No. 5. Iowa City: the University, 1923. 29 p.
389. SHIMBERG, MYRA E. *An Investigation into the Validity of Norms; with Special Reference to Urban and Rural Groups*. Archives of Psychology, No. 104. New York: Columbia University, 1929. 84 p.
390. STENQUIST, JOHN L. *Measurements of Mechanical Ability*. Contributions to Education, No. 130. New York: Teachers College, Columbia University, 1923. 101 p.
391. STINE, J. RAY. *A Comparative Study of the Intelligence, Work Experiences, Social Status of Part Time Public School Students Indicative of the Part Time Problem in Ohio*. Columbus: Ohio State University Press, 1927. 84 p.
392. STRONG, EDWARD KELLOGG. *Change of Interests with Age*. Stanford University, Calif.: Stanford University Press, 1931. 235 p.
393. TERMAN, LEWIS M. "The Gifted Child." *A Handbook of Child Psychology*. (Edited by Carl Murchison). Worcester, Mass.: Clark University Press, 1931. p. 568-84.
394. TERMAN, LEWIS M., and OTHERS. *Mental and Physical Traits of a Thousand Gifted Children*. Genetic Studies of Genius, Vol. 1. Stanford University, Calif.: Stanford University Press, 1925. 648 p.
395. THYEN, H. *Über Geschlechtsunterschiede der intellektuellen Leistungsfähigkeit auf Grund statistischer Erhebungen an höheren Koedukationsschulen*. Langensalza: Beltz, 1929. 76 p.
396. TOOPS, HERBERT A., and EDGERTON, HAROLD A. *Report on Second Annual Statewide Testing of High School Seniors*. Columbus, Ohio: the Authors (Ohio State University), March 30, 1931. 31 p. (ms.).
397. TOOPS, HERBERT A., and EDGERTON, HAROLD A. *Report on the High School State Wide Senior Intelligence Testing Project*. Ohio High School Bulletin, No. 2. April 29, 1930. 9 p.
398. TOOPS, HERBERT A., and EDGERTON, HAROLD A. *Scores of 30,000 High School Seniors on Form 17 of O. S. U. Psychological Examination*. Ohio High School Bulletin, No. 4. March 30, 1931. 31 p.
399. TOOPS, HERBERT A. *Tests for Vocational Guidance of Children Thirteen to Sixteen*. Contributions to Education, No. 136. New York: Teachers College, Columbia University, 1923. 159 p.
400. TRABUE, M. R. "Some Products of North Carolina's Public High Schools." *High School Journal* 7: 3-8; January, 1924.
401. WATSON, GOODWIN B. "Character Tests and Their Applications through 1930." *Review of Education Research* 2: 185-270; June, 1932. Washington, D. C.: American Educational Research Association, a department of the National Education Association.
402. WATSON, GOODWIN B. "Measures of Character and Personality." *Psychological Bulletin* 29: 147-76; February, 1932.
403. WELLMAN, BETH L. "Physical Growth and Motor Development and Their Relation to Mental Development in Children." *A Handbook of Child Psychology*. (Edited by Carl Murchison). Worcester, Mass.: Clark University Press, 1931. p. 242-77.
404. WOOD, ELEANOR PERRY. *The Educational Achievement and Intelligence of Independent School Children 1927-28*. Educational Records Bulletin, No. 2. New York: Educational Records Bureau, 1929. 78 p.
405. WOOD, ELEANOR PERRY. *The Educational Achievement and Intelligence of Independent School Children 1929-30*. Educational Records Bulletin, No. 6. New York: Educational Records Bureau, 1931. 141 p.

406. YERKES, ROBERT M., editor. "Intelligence Ratings of Occupational Groups." *Memoirs of the National Academy of Sciences*. Vol. 15. Washington, D. C.: Government Printing Office, 1921. p. 819-37.

Chapter VI. Guidance and Counseling

407. BINGHAM, WALTER VAN DYKE, and MOORE, BRUCE VICTOR. *How To Interview*. New York: Harper and Brothers, 1931. 320 p. ✓
408. BREWER, JOHN MARKS. *Education as Guidance; an Examination of the Possibilities of a Curriculum in Terms of Life Activities, in Elementary and Secondary School and College*. New York: Macmillan Co., 1932. 668 p.
409. DEARBORN, WALTER FENNO. *Intelligence Tests: Their Significance for School and Society*. Boston: Houghton Mifflin Co., 1928. 336 p. ✓
410. FRYER, DOUGLAS. *The Measurement of Interests in Relation to Human Adjustment*. New York: Henry Holt and Co., 1931. 488 p. ✓
411. HULL, CLARK L. *Aptitude Testing*. Yonkers-on-Hudson, N. Y.: World Book Co., 1928. 536 p.
412. JONES, ARTHUR J. *Principles of Guidance*. New York: McGraw-Hill Book Co., 1930. 385 p.
413. JONES, WALTER B., editor. *Basic Units for an Introductory Course in Vocational Guidance*. New York: McGraw-Hill Book Co., 1931. 194 p.
414. KITSON, HARRY DEXTER. *I Find My Vocation*. New York: McGraw-Hill Book Co., 1931. 216 p.
415. KOOS, LEONARD V., and KEFAUVER, GRAYSON N. *Guidance in Secondary Schools*. New York: Macmillan Co., 1932. 640 p.
416. MYERS, GEORGE E. *The Problem of Vocational Guidance*. New York: Macmillan Co., 1929. 311 p.
417. REAVIS, W. C. "Guidance Programs in Secondary Schools." *Bulletin (Proceedings)* No. 40: 67-81; March, 1932. Berwyn, Ill.: Department of Secondary School Principals, National Education Association (H. V. Church, sec.).
418. *Vocational Guidance Magazine*. Published by the National Vocational Guidance Association, at the Bureau of Vocational Guidance, Harvard University, Cambridge, Mass.
419. WHITE HOUSE CONFERENCE ON CHILD HEALTH AND PROTECTION. *Vocational Guidance*. New York: Century Co., 1932. 396 p.

Chapter VII. Extra-Curriculum Activities

420. AMOS, THYRSA W. "Student Government." *Twelfth Yearbook (Proceedings)*. Washington, D. C.: National Association of Deans of Women, a department of the National Education Association, 1925. p. 119-29.
421. ANDERSON, EARL W. "Extra-Curricular Duties." *Educational Research Bulletin (Ohio State University)* 8: 315-17; October 9, 1929.
422. ANDREWS, MARIE G. "A Time Questionnaire Study." *Personnel Journal* 9: 72-76; June, 1930.
423. ANGELL, ROBERT COOLEY. *The Campus*. New York: D. Appleton and Co., 1928. 239 p.
424. ANGELL, ROBERT COOLEY, director. *A Study in Undergraduate Adjustment*. Chicago: University of Chicago Press, 1930. 164 p.
425. ARCHER, C. P. "School Government as an Educative Agency." *School Review* 31: 430-38; June, 1923.
426. ARNOLD, LEROY. "Should Students Receive Credit for Recreational Pursuits?" *Pedagogical Seminary* 26: 56-72; March, 1919.
427. ASTELL, LOUIS A., and ODELL, C. W. *High School Science Clubs*. University of Illinois Bulletin, Vol. 39, No. 29. Educational Research Bulletin, No. 60. Urbana, Ill.: the University, 1932. 77 p.
428. AYER, FRED C. "Pupil-Participation in Extra-Curricular Activities in the High Schools of Everett and Seattle, Washington." *Extra-Curricular Activities*. Twenty-fifth Yearbook, Part 2. National Society for the Study of Education. Bloomington, Ill.: Public School Publishing Co., 1926. Chapter 6, p. 67-80.

429. BARSON, HELEN CORLISS. "The Financial Support of Clubs." *Junior-Senior High School Clearing House* 5: 407-12; March, 1931.
430. BACON, FRANCIS L. "The Correlation of Extra-Curricular Activities with the Department of Business Education." *School Review* 30: 671-78; November, 1922.
431. BARR, A. S. "The Training of Teachers for the Direction of Extra-Curricular Activities." *Educational Administration and Supervision* 15: 350-55; May, 1929.
432. BEAR, ROBERT M. "Factors Affecting the Success of College Freshmen." *Journal of Applied Psychology* 12: 517-23; October, 1928.
433. BEATTY, JOHN D., and CLEETON, GLEN U. "Predicting Achievement in College and after Graduation." *Personnel Journal* 6: 344-51; February, 1928.
434. BELLINGRATH, GEORGE C. *Qualities Associated with Leadership in the Extra-Curricular Activities of the High School*. Contributions to Education, No. 399. New York: Teachers College, Columbia University, 1930. 57 p.
435. BELTING, PAUL E. *The Community and Its High School*. New York: D. C. Heath and Co., 1923. 371 p.
436. BENJAMIN, C. H. "Fraternity Grades at Purdue University." *Science* 41: 135-38; January 22, 1915.
437. BENJAMIN, C. H. "Student Activities." *School and Society* 3: 231-34; February 12, 1916.
438. BENNETT, H. S., and JONES, B. R. "Leadership in Relation to Intelligence." *School Review* 31: 125-28; February, 1923.
- ✓ 439. BEU, F. A. "The Mental Ability of Athletes in Comparison with Non-Athletes in High School." *American School Board Journal* 73: 45, 155; August, 1926.
440. BLACK, A. E. "Extra-Curricular Activities in the City and Exempted-Village High Schools of Ohio." *Educational Research Bulletin (Ohio State University)* 5: 131-35; March 31, 1926.
441. BODDEN, WILLIAM. *Report of the Auditor of Student Organizations*. Lafayette, Ind.: Purdue University, 1930.
442. BORGESON, F. C. *All-School Activities*. New York: A. S. Barnes and Co., 1931. 143 p.
443. BORGESON, F. C. *Group-Interest Activities*. New York: A. S. Barnes and Co., 1931. 135 p.
444. BRAMMELL, P. ROY. "Looking Ahead in Secondary-School Athletics." *School Review* 40: 735-50; December, 1932.
445. BRANDENBURG, G. C. *Successful Alumni—What They Do and What They Think*. Purdue University Bulletin, Vol. 31, No. 3, Studies in Higher Education, No. 16. Lafayette, Ind.: the University, 1930. 36 p.
446. BRIDGMAN, DONALD S. "Success in College and Business." *Personnel Journal* 9: 1-19; June, 1930.
447. BROOKS, ROBERT C. "Point Systems Limiting Outside Activities of College Students." *School and Society* 2: 313-15; August 28, 1915.
448. BROOKS, WENDELL S. "The Student Publications at Northwestern." *Educational Administration and Supervision* 10: 533-41; November, 1924.
449. BROWN, ELMER E. *The Making of Our Middle Schools*. New York: Longmans, Green and Co., 1910. 547 p.
450. BUCKTON, L. V. *College and University Bands: Their Organization and Administration*. Contributions to Education, No. 374. New York: Teachers College, Columbia University, 1929. 102 p.
451. BYRNS, RUTH. "Concerning College Grades." *School and Society* 31: 684-86; May 17, 1930.
452. CALDWELL, OTIS W., and WELLMAN, BETH. "Characteristics of School Leaders." *Journal of Educational Research* 14: 1-13; June, 1926.
453. CHADWICK, R. D. "The Financing of Inter-Junior College Athletics." *School Executives Magazine* 50: 15-17, 42; September, 1930.
454. CHAPIN, F. STUART, and MEHUS, O. MYKING. *Extra-Curricular Activities at the University of Minnesota*. Minneapolis, Minn.: University of Minnesota Press, 1929. 140 p.
- ✓ 455. CHAPIN, F. STUART. "Extra-Curricular Activities of College Students: A Study in College Leadership." *School and Society* 23: 212-16; February 13, 1926.
456. CHAPIN, F. STUART. "Leadership and Group Activity." *Journal of Applied Sociology* 8: 141-45; January-February, 1924.

457. CHAPIN, F. STUART. "Research Studies of Extracurricular Activities and Their Significance in Reflecting Social Changes." *Journal of Educational Sociology* 4: 491-98; April, 1931.
458. CLINE, EARL. "Advisability of Inter-High-School Contests in Athletics." *American Physical Education Review* 15: 22-31; January, 1910.
459. COLEMAN, C. T. "The Characteristics of Disciplinary Problem Pupils in High School." *School Review* 38: 434-42; June, 1930.
460. CONSTANCE, CLIFFORD L. "Greeks of the Campus." *School and Society* 30: 409-14; September 21, 1929.
461. COOK, INEZ M., and GOODRICH, T. V. "How High-School Pupils Spend Their Time." *School Review* 36: 771-78; December, 1928.
462. COOK, WILLIAM A., and THOMPSON, MABEL. "A Comparison of Letter Boys and Non-Letter Boys in a City High School." *School Review* 36: 350-58; May, 1928.
463. COUNTS, GEORGE S. "Procedures in Evaluating Extra-Curriculum Activities." *School Review* 34: 412-21; June, 1926.
464. COWLEY, W. H. *The Personnel Bibliographical Index*. Columbus: Ohio State University, 1932. 433 p.
465. COX, PHILIP W. L. "The Evaluation of Student Activities." *Junior-Senior High School Clearing House* 4: 265-69; January, 1930.
466. CRAWFORD, ALBERT BEECHER. "Extra-Curricular Activities and Academic Work." *Personnel Journal* 7: 121-29; August, 1928.
467. DALTHORP, C. J. "Where Pupils Must Participate in Extra-Curricular Activities." *Nation's Schools* 7: 47-51; April, 1931.
468. DAVIS, CALVIN O. "The Quinquennial Report." *Proceedings, 1925*. Part 1. Urbana, Ill.: North Central Association of Colleges and Secondary Schools (A. W. Clevenger, sec., University of Illinois), 1925. p. 46-65.
469. DAVIS, CHARLES W., and McDONALD, HOVEY C. "Intercollegiate and Intramural Athletics in the Junior Colleges of California." *California Quarterly of Secondary Education* 6: 85-90; October, 1930.
470. DEAM, THOMAS M., chairman, and OTHERS. "Report of the Sub-committee on Extra-Curricular Activities." *North Central Association Quarterly* 3: 542-88; March, 1929.
471. DEAM, THOMAS M., and BEAR, OLIVE M. *Socializing the Pupil Through Extra-Curricular Activities*. New York: Benjamin H. Sanborn and Co., 1928. 324 p.
472. DEE, M. BARBARA. "Extra-Curriculum Activities in Massachusetts High Schools." *School Review* 36: 43-51; January, 1928.
473. DEMENT, ALICE L. "Values in Extra-Curricular Organizations in the High School." *School Review* 32: 40-48; January, 1924.
474. DREWRY, RAYMOND G. *Pupil Participation in High School Control*. New York: Harcourt, Brace and Co., 1928. 220 p.
475. DUSTIN, C. R. "An Investigation of the Scope, Working Practices, and Limitations of Pupil Participation in Government in Secondary Schools." *School Review* 34: 431-42; June, 1926.
476. EDERLE, HELEN. "A Partial Study of Extracurricular Activities in Indiana High Schools in 1929-30." *Teachers College Journal (Indiana State Teachers College)* 2: 33-41; November, 1930.
477. EDWARDS, R. H.; ARTMAN, J. M.; and FISHER, GALEN M., editors. *Undergraduates*. New York: Doubleday, Doran and Co., 1928. 366 p.
478. EELLS, WALTER CROSBY, and BRAND, R. ROMAYNE. "Extra-Curriculum Activities in Junior Colleges in California." *School Review* 38: 276-79; April, 1930.
479. ENGELHARDT, N. L., and GRILL, G. W. "Internal School Accounting for Extra-Curricular Activities in Public Schools." *Teachers College Record* 26: 753-64; May, 1925.
480. ENGELHARDT, N. L., and ENGELHARDT, FRED. *Public School Business Administration*. New York: Teachers College, Columbia University, 1927. Chapter 32, "Accounting for Internal Services and Extra-Curricular Activities," p. 795-815.
481. EURICH, ALVIN C. "The Relation of Achievement between College Fraternity and Non-Fraternity Groups." *School and Society* 26: 624-30; November 12, 1927.
482. EVANS, EVAN E., and HALLMAN, MALCOLM SCOTT. *Home Rooms*. New York: A. S. Barnes and Co., 1930. 154 p.

429. BARSON, HELEN CORLISS. "The Financial Support of Clubs." *Junior-Senior High School Clearing House* 5: 407-12; March, 1931.
430. BACON, FRANCIS L. "The Correlation of Extra-Curricular Activities with the Department of Business Education." *School Review* 30: 671-78; November, 1922.
431. BARR, A. S. "The Training of Teachers for the Direction of Extra-Curricular Activities." *Educational Administration and Supervision* 15: 350-55; May, 1929.
432. BEAR, ROBERT M. "Factors Affecting the Success of College Freshmen." *Journal of Applied Psychology* 12: 517-23; October, 1928.
433. BEATTY, JOHN D., and CLEETON, GLEN U. "Predicting Achievement in College and after Graduation." *Personnel Journal* 6: 344-51; February, 1928.
434. BELLINGRATH, GEORGE C. *Qualities Associated with Leadership in the Extra-Curricular Activities of the High School*. Contributions to Education, No. 399. New York: Teachers College, Columbia University, 1930. 57 p.
435. BELTING, PAUL E. *The Community and Its High School*. New York: D. C. Heath and Co., 1923. 371 p.
436. BENJAMIN, C. H. "Fraternity Grades at Purdue University." *Science* 41: 135-38; January 22, 1915.
437. BENJAMIN, C. H. "Student Activities." *School and Society* 3: 231-34; February 12, 1916.
438. BENNETT, H. S., and JONES, B. R. "Leadership in Relation to Intelligence." *School Review* 31: 125-28; February, 1923.
- ✓ 439. BEU, F. A. "The Mental Ability of Athletes in Comparison with Non-Athletes in High School." *American School Board Journal* 73: 45, 155; August, 1926.
440. BLACK, A. E. "Extra-Curricular Activities in the City and Exempted-Village High Schools of Ohio." *Educational Research Bulletin (Ohio State University)* 5: 131-35; March 31, 1926.
441. BODDEN, WILLIAM. *Report of the Auditor of Student Organizations*. Lafayette, Ind.: Purdue University, 1930.
442. BORGESON, F. C. *All-School Activities*. New York: A. S. Barnes and Co., 1931. 143 p.
443. BORGESON, F. C. *Group-Interest Activities*. New York: A. S. Barnes and Co., 1931. 135 p.
444. BRAMMELL, P. ROY. "Looking Ahead in Secondary-School Athletics." *School Review* 40: 735-50; December, 1932.
445. BRANDENBURG, G. C. *Successful Alumni—What They Do and What They Think*. Purdue University Bulletin, Vol. 31, No. 3, Studies in Higher Education, No. 16. Lafayette, Ind.: the University, 1930. 36 p.
446. BRIDGMAN, DONALD S. "Success in College and Business." *Personnel Journal* 9: 1-19; June, 1930.
447. BROOKS, ROBERT C. "Point Systems Limiting Outside Activities of College Students." *School and Society* 2: 313-15; August 28, 1915.
448. BROOKS, WENDELL S. "The Student Publications at Northwestern." *Educational Administration and Supervision* 10: 533-41; November, 1924.
449. BROWN, ELMER E. *The Making of Our Middle Schools*. New York: Longmans, Green and Co., 1910. 547 p.
450. BUCKTON, L. V. *College and University Bands: Their Organization and Administration*. Contributions to Education, No. 374. New York: Teachers College, Columbia University, 1929. 102 p.
451. BYRNS, RUTH. "Concerning College Grades." *School and Society* 31: 684-86; May 17, 1930.
452. CALDWELL, OTIS W., and WELLMAN, BETH. "Characteristics of School Leaders." *Journal of Educational Research* 14: 1-13; June, 1926.
453. CHADWICK, R. D. "The Financing of Inter-Junior College Athletics." *School Executives Magazine* 50: 15-17, 42; September, 1930.
454. CHAPIN, F. STUART, and MEHUS, O. MYKING. *Extra-Curricular Activities at the University of Minnesota*. Minneapolis, Minn.: University of Minnesota Press, 1929. 140 p.
- ✓ 455. CHAPIN, F. STUART. "Extra-Curricular Activities of College Students: A Study in College Leadership." *School and Society* 23: 212-16; February 13, 1926.
456. CHAPIN, F. STUART. "Leadership and Group Activity." *Journal of Applied Sociology* 8: 141-45; January-February, 1924.

457. CHAPIN, F. STUART. "Research Studies of Extracurricular Activities and Their Significance in Reflecting Social Changes." *Journal of Educational Sociology* 4: 491-98; April, 1931.
458. CLINE, EARL. "Advisability of Inter-High-School Contests in Athletics." *American Physical Education Review* 15: 22-31; January, 1910.
459. COLEMAN, C. T. "The Characteristics of Disciplinary Problem Pupils in High School." *School Review* 38: 434-42; June, 1930.
460. CONSTANCE, CLIFFORD L. "Greeks of the Campus." *School and Society* 30: 409-14; September 21, 1929.
461. COOK, INEZ M., and GOODRICH, T. V. "How High-School Pupils Spend Their Time." *School Review* 36: 771-78; December, 1928.
462. COOK, WILLIAM A., and THOMPSON, MABEL. "A Comparison of Letter Boys and Non-Letter Boys in a City High School." *School Review* 36: 350-58; May, 1928.
463. COUNTS, GEORGE S. "Procedures in Evaluating Extra-Curriculum Activities." *School Review* 34: 412-21; June, 1926.
464. COWLEY, W. H. *The Personnel Bibliographical Index*. Columbus: Ohio State University, 1932. 433 p.
465. COX, PHILIP W. L. "The Evaluation of Student Activities." *Junior-Senior High School Clearing House* 4: 265-69; January, 1930.
466. CRAWFORD, ALBERT BEECHER. "Extra-Curricular Activities and Academic Work." *Personnel Journal* 7: 121-29; August, 1928.
467. DALTHERP, C. J. "Where Pupils Must Participate in Extra-Curricular Activities." *Nation's Schools* 7: 47-51; April, 1931.
468. DAVIS, CALVIN O. "The Quinquennial Report." *Proceedings, 1925*. Part 1. Urbana, Ill.: North Central Association of Colleges and Secondary Schools (A. W. Clevenger, sec., University of Illinois), 1925. p. 46-65.
469. DAVIS, CHARLES W., and McDONALD, HOVEY C. "Intercollegiate and Intramural Athletics in the Junior Colleges of California." *California Quarterly of Secondary Education* 6: 85-90; October, 1930.
470. DEAM, THOMAS M., chairman, and OTHERS. "Report of the Sub-committee on Extra-Curricular Activities." *North Central Association Quarterly* 3: 542-88; March, 1929.
471. DEAM, THOMAS M., and BEAR, OLIVE M. *Socializing the Pupil Through Extra-Curricular Activities*. New York: Benjamin H. Sanborn and Co., 1928. 324 p.
472. DEE, M. BARBARA. "Extra-Curriculum Activities in Massachusetts High Schools." *School Review* 36: 43-51; January, 1928.
473. DEMENT, ALICE L. "Values in Extra-Curricular Organizations in the High School." *School Review* 32: 40-48; January, 1924.
474. DREWRY, RAYMOND G. *Pupil Participation in High School Control*. New York: Harcourt, Brace and Co., 1928. 220 p.
475. DUSTIN, C. R. "An Investigation of the Scope, Working Practices, and Limitations of Pupil Participation in Government in Secondary Schools." *School Review* 34: 431-42; June, 1926.
476. EDERLE, HELEN. "A Partial Study of Extracurricular Activities in Indiana High Schools in 1929-30." *Teachers College Journal (Indiana State Teachers College)* 2: 33-41; November, 1930.
477. EDWARDS, R. H.; ARTMAN, J. M.; and FISHER, GALEN M., editors. *Undergraduates*. New York: Doubleday, Doran and Co., 1928. 366 p.
478. EELLS, WALTER CROSBY, and BRAND, R. ROMAYNE. "Extra-Curriculum Activities in Junior Colleges in California." *School Review* 38: 276-79; April, 1930.
479. ENGELHARDT, N. L., and GRILL, G. W. "Internal School Accounting for Extra-Curricular Activities in Public Schools." *Teachers College Record* 26: 753-64; May, 1925.
480. ENGELHARDT, N. L., and ENGELHARDT, FRED. *Public School Business Administration*. New York: Teachers College, Columbia University, 1927. Chapter 32, "Accounting for Internal Services and Extra-Curricular Activities," p. 795-815.
481. EURICH, ALVIN C. "The Relation of Achievement between College Fraternity and Non-Fraternity Groups." *School and Society* 26: 624-30; November 12, 1927.
482. EVANS, EVAN E., and HALLMAN, MALCOLM SCOTT. *Home Rooms*. New York: A. S. Barnes and Co., 1930. 154 p.

483. EWART, FRANK CARMAN. "Are Phi Beta Kappas 'Grinds'?" *Journal of Higher Education* 2: 36-38; January, 1931.
484. "Extra-Curricular Activities in High Schools." *American Educational Digest* 44: 389-92, 415-16; May, 1925.
485. FORMAN, W. O. "Multiple Activity Choices Given Pupils." *School Life* 15: 119; February, 1930.
486. FOSTER, CHARLES R. *Extra-Curricular Activities in the High School*. Richmond, Va.: Johnson Publishing Co., 1925. 222 p.
487. FRASIER, GEORGE WILLARD, and WRINKLE, WILLIAM LAWRENCE. "Experiments in Teachers College Administration. V. An Experiment in Student Participation." *Educational Administration and Supervision* 14: 499-505; October, 1928.
488. FRETWELL, ELBERT K. "Education for Leadership: Training Citizens through Recreation." *Teachers College Record* 20: 324-52; September, 1919.
489. FRETWELL, ELBERT K. *Extra-Curricular Activities in Secondary Schools*. Boston: Houghton Mifflin Co., 1931. 552 p.
490. FRETWELL, ELBERT K. "Extra-Curricular Activities of Secondary Schools; Bibliographies of Home Rooms, Pupil Participation in Government, Finances, Assemblies, and Fraternities." *Teachers College Record* 27: 901-29; June, 1926.
491. FRETWELL, ELBERT K. "Extra-Curricular Activities of Secondary Schools; Bibliographies on School Clubs and on Debating." *Teachers College Record* 28: 1018-34; June, 1927.
492. FRETWELL, ELBERT K. "Extra-Curricular Activities of Secondary Schools; a Bibliography of Pupil Participation in the Extra-Curricular Life of the School." *Teachers College Record* 24: 60-72; January, 1923.
493. FRETWELL, ELBERT K. "Extra-Curricular Activities of Secondary Schools; a Bibliography on High-School Fraternities and Sororities." *Teachers College Record* 24: 147-58; March, 1923.
494. FRETWELL, ELBERT K. "Extra-Curricular Activities of Secondary Schools; a Bibliography on the High School Assembly." *Teachers College Record* 25: 61-69; January, 1924.
495. FRETWELL, ELBERT K., and O'NEIL, MARION. "Extra-Curricular Activities of Secondary Schools; School Publications." *Teachers College Record* 26: 59-73; September, 1924.
496. FRETWELL, ELBERT K. "General Survey of Practices: Six Year Elementary Schools." *Extra-Curricular Activities*. Twenty-fifth Yearbook, Part 2. National Society for the Study of Education. Bloomington, Ill.: Public School Publishing Co., 1926. Chapter 5, p. 55-66.
497. FRETWELL, ELBERT K. "Seven Purposes of Pupil Participation in Government. Abstract." *Proceedings, 1931*. Vol. 69. Washington, D. C.: National Education Association, 1931. p. 599-601.
498. GAMBRILL, BESSIE LEE. *College Achievement and Vocational Efficiency*. Contributions to Education, No. 121. New York: Teachers College, Columbia University, 1922. 100 p.
499. GAVIT, JOHN P. *College*. New York: Harcourt, Brace and Co., 1925. 342 p.
500. GILBERT, LUTHER C. "Activities of Junior College Transfers." *Junior College Journal* 1: 418-26; April, 1931.
501. GILCHRIST, ROBERT S. "Inadequacy of Training of Secondary-School Teachers and Principals." *School Review* 39: 140-46; February, 1931.
502. GRANVILLE, ROBERT. "The High-School Paper as an English Project." *English Journal* 12: 566-68; October, 1923.
503. GRAY, HOWARD A. *Some Factors in the Undergraduate Careers of Young College Students*. Contributions to Education, No. 437. New York: Teachers College, Columbia University, 1930. 66 p.
504. GRIZZELL, E. D. "Evolution of Student Activities in the Secondary School." *Educational Outlook* 1: 19-31; November, 1926.
505. GRIZZELL, E. D. *Origin and Development of the High School in New England before 1865*. New York: Macmillan Co., 1923. 428 p.
506. GUILFOIL, KELSEY. "Correlating the School Paper and English Composition." *English Journal* 13: 269-71; April, 1924.
- ✓ 507. HALL, ROBERT T. "How Athletes and Non-Athletes Compare in Mental Ability and in Educational Achievement." *American Physical Education Review* 33: 388-89; June, 1928.

508. HARRIMAN, PHILIP L. "The Possible Relation between Scores on a Psychological Examination and Membership in a College Fraternity." *Peabody Journal of Education* 8: 279-81; March, 1931.
509. HAYDEN, F. S. "Student Councils in California High Schools." *California Quarterly of Secondary Education* 5: 266-69; April, 1930.
510. HAYES, WAYLAND JACKSON. *Some Factors Influencing Participation in Voluntary School Group Activities*. Contributions to Education, No. 419. New York: Teachers College, Columbia University, 1930. 82 p.
511. HILDERBRANT, EDITH L. "Physical Training and Scholarship." *Education* 37: 369-80; February, 1917.
512. HINDMAN, DARWIN A. "Athletics and Scholarship at the Ohio State University." *School and Society* 30: 93-96; July 20, 1929.
513. HINDMARSH, A. E. "Scholarships and Athletes." *North Central Association Quarterly* 5: 340-44; December, 1930.
514. HINES, L. N. "The Business Management of Student Activities." *Teachers College Journal (Indiana State Teachers College)* 1: 1-9; September, 1929.
515. HOLCH, A. E. "Financial Management of School Organizations." *Education* 47: 114-18; October, 1926.
516. HULL, J. D. "A Comparison of the Grades and Intelligence Quotients of Athletes and Non-Athletes in High School." *American School Board Journal* 69: 44, 107-8; August, 1924.
517. HUSBAND, RICHARD W. "Studies in Student Personnel at Dartmouth College." *Journal of Personnel Research* 2: 70-79; June, 1923.
518. HUTCHINSON, MARK E. "College Athletics and Scholarship." *School and Society* 29: 151-52; February 2, 1929.
519. HUTCHINSON, RUTH GILLETTE, and CONNARD, MARY HAYWARD. "What's in a College Week?" *School and Society* 24: 768-72; December 18, 1926.
520. IFFERT, R. E., and ROHRBACH, Q. A. W. "Pupil Attitude with Respect to High School Athletics." *University of Pittsburgh School of Education Journal* 2: 1-9; September-October, 1926.
- 521. JACKSON, NELSON A. "Pupil Government in Secondary Schools." *Education* 42: 197-210; December, 1921.
522. JACOBSEN, JOHN M. "Athletics and Scholarship in the High School." *School Review* 39: 280-87; April, 1931.
523. JERREL, LOUISE. "A Club Experiment in the Amos Hiatt Junior High School." *Elementary School Journal* 27: 511-17; March, 1927.
524. JOHNSON, ETHEL. "Student Activities in the Small High School." *American Schoolmaster* 14: 383-87; December, 1921.
525. JOHNSTON, EDGAR G. *Point Systems and Awards*. New York: A. S. Barnes and Co., 1930. 160 p.
526. JONES, GERTRUDE. "Survey of Extra-Curriculum Activities in the High School." *School Review* 34: 734-44; December, 1926.
- 527. JONES, GERTRUDE. "Three Principles Underlying the Administration of Extra-Curricular Activities." *School Review* 33: 510-22; September, 1925.
528. JORDAN, RIVERDA HARDING. *Extra-Classroom Activities in Elementary and Secondary Schools*. New York: Thomas Y. Crowell Co., 1928. 302 p.
529. KATZ, DANIEL, and ALLPORT, FLOYD HENRY. *Students' Attitudes*. Syracuse, N. Y.: Craftsman Press, 1931. 408 p.
530. KEENE, CHARLES H. "Athletic and Scholastic Competition." *Mind and Body* 31: 399-405; February, 1925.
531. KEFAUVER, GRAYSON N., and SCOTT, ROBERT E. "The Home Room in the Administration of Secondary Schools." *Teachers College Record* 31: 624-41; April, 1930.
532. KEFAUVER, GRAYSON N., and BULLARD, CATHARINE. "Student Activities in Junior Colleges." *Teachers College Record* 32: 445-56; February, 1931.
533. KING, I. F. *Relation of Athletics and Scholarship*. Report summarized in: Elmer Harrison Wilds' *Extra-Curricular Activities*. New York: Century Co., 1926. p. 149-50.
- *534. KINGMAN, CHARLES H. "Extra-Curricular Work in Illinois High Schools." *American Schoolmaster* 16: 83-85; November, 1923.
535. KIRKLIN, CURTIS D. "The Administration of Athletic Funds in Indiana High Schools." *High School Principals' Conference*, 1925. Indiana University, School

- of Education Bulletin, Vol. 2, No. 2. Bloomington, Ind.: the University, 1925. p. 57-66.
536. KLEIN, ARTHUR J., director. *Survey of Land-Grant Colleges and Universities*. Vol. 1. U. S. Dept. of the Interior, Office of Education, Bulletin, 1930, No. 9. Washington, D. C.: Government Printing Office, 1930. 998 p.
 537. KNOX, JAMES E., and DAVIS, ROBERT A. "The Scholarship of University Students Participating in Extra-Curricular Activities." *Educational Administration and Supervision* 15: 481-93; October, 1929.
 538. KOOS, LEONARD V. "Analysis of the General Literature on Extra-Curricular Activities." *Extra-Curricular Activities*. Twenty-fifth Yearbook, Part 2. National Society for the Study of Education. Bloomington, Ill.: Public School Publishing Co., 1926. Chapter 2, p. 9-22.
 539. KOOS, LEONARD V. "Evaluating Extra-Curricular Activities." *Extra-Curricular Activities*. Twenty-fifth Yearbook, Part 2. National Society for the Study of Education. Bloomington, Ill.: Public School Publishing Co., 1926. Chapter 20, p. 225-35.
 540. LANTZ, W. W. *The Value of Athletics to High School Students as Compared with the Value of Other Phases of School Life*. Unpublished master's thesis, University of Pittsburgh, 1922.
 - ✓ 541. LARUE, J. D. "Effect of Athletics on High School Scholarship." *American Schoolmaster* 10: 166-69; April, 1917.
 542. LECOMPTE, PEARLE. *Dramatics*. New York: A. S. Barnes and Co., 1931. 163 p.
 543. LEVI, ISABELLE J. "Student Leadership in Elementary and Junior High School, and Its Transfer into Senior High School." *Journal of Educational Research* 22: 135-39; September, 1930.
 544. LINDEL, A. L. "Correlation between Class Work and Athletics." *Athletic Journal* 5: 44-48; November, 1924.
 545. LLOYD-JONES, ESTHER. *Student Personnel Work at Northwestern University*. New York: Harper and Brothers, 1929. 253 p.
 546. MCCLINTOCK, R. D. "The Status of High School Practices Relating to Clubs." *Summary of Investigations Relating to Extra-Curricular Activities*. (Edited by Earle U. Rugg). Greeley, Colo.: Colorado State Teachers College, 1930. Chapter 9, p. 125-48.
 547. MCCUEN, THERON L. "Leadership and Intelligence." *Education* 50: 89-95; October, 1929.
 548. MACDONALD, MARGARET ANNE. *The Class Organization and Activities*. New York: A. S. Barnes and Co., 1931. 134 p.
 549. MACKAY, ALEXANDER LESLIE GORDON. *Experiments in Educational Self-Government*. London: George Allen and Unwin, 1931. 272 p.
 550. MCKOWN, HARRY C. *Extra-Curricular Activities*. New York: Macmillan Co., 1927. 617 p.
 551. MCKOWN, HARRY C., and HORNER, MEYERS B. "Financial Administration of Extra-Curricular Activities." *Extra-Curricular Activities*. Twenty-fifth Yearbook, Part 2. National Society for the Study of Education. Bloomington, Ill.: Public School Publishing Co., 1926. Chapter 10, p. 111-26.
 552. MCKOWN, HARRY C. *School Clubs, Their Organization, Administration, Supervision, and Activities*. New York: Macmillan Co., 1929. 498 p.
 553. MCNEIL, ROBERT H. "Training on College Newspapers." *School and Society* 29: 419-20; March 30, 1929.
 554. MANAHAN, JOHN L. "A Study of Student Government in Colleges." *Nation's Schools* 2: 45-51; July, 1928.
 555. MASTERS, JOSEPH G. "General Survey of Practices: Four-Year and Senior High School." *Extra-Curricular Activities*. Twenty-fifth Yearbook, Part 2. National Society for the Study of Education. Bloomington, Ill.: Public School Publishing Co., 1926. Chapter 4, p. 39-54.
 556. MAY, ERIC OSCAR. "One Fee for All Pupil Activities." *School Review* 37: 304-6; April, 1929.
 557. MAYBERRY, BURT A. "A Study of High-School Pupils to Determine the Effect of Student Council Participation on the Formation of Certain Habits of Citizenship." *Journal of Educational Research* 24: 305-7; November, 1931.
 558. MEHUS, O. MYKING. "Extra-Curricular Activities of College Students." *School and Society* 35: 574-76; April 23, 1932.

559. MEYER, HAROLD D., and EDDLEMAN, SAMUEL McKEE. *Financing Extra-Curricular Activities*. New York: A. S. Barnes and Co., 1929. 132 p.
560. MEYER, HAROLD D. *A Handbook of Extra-Curricular Activities in the High School*. New York: A. S. Barnes and Co., 1926. 402 p.
561. MEYER, HAROLD D. *The School Club Program*. New York: A. S. Barnes and Co., 1931. 178 p.
562. MILLARD, C. V. *The Organization and Administration of Extra-Curricular Activities*. New York: A. S. Barnes and Co., 1930. 145 p.
563. MILLARD, C. V. "The Regulation of Participation in Extra-Curriculum Activities in the Six-Year High School." *School Review* 36: 302-6; April, 1928.
564. MOFFETT, M'LEDGE. *The Social Background and Activities of Teachers College Students*. Contributions to Education, No. 375. New York: Teachers College, Columbia University, 1929. 133 p.
565. MONROE, WALTER S. "The Effect of Participation in Extra-Curriculum Activities on Scholarship in the High School." *School Review* 37: 747-52; December, 1929.
566. MORLEY, E. E., chairman. "The Report of the Committee on Athletics in Secondary Schools." *North Central Association Quarterly* 6: 21-30; June, 1931.
567. MORLEY, E. E. "Report of the North Central Association Committee on Athletics in Secondary Schools." *North Central Association Quarterly* 5: 332-39; December, 1930.
568. NATIONAL SOCIETY FOR THE STUDY OF EDUCATION. *Extra-Curricular Activities*. Twenty-fifth Yearbook, Part 2. Bloomington, Ill.: Public School Publishing Co., 1926. 280 p.
569. NEWCOMER, MABEL. "The Phi Beta Kappa Student." *School and Society* 25: 24; January 1, 1927.
570. NORTON, HERMAN J. "After-School Athletic and Recreation Activities in the Senior High Schools of Rochester, New York." *Junior-Senior High School Clearing House* 4: 278-84; January, 1930.
571. ODELL, C. W., and BLOUCH, JOHN H. *An Annotated Bibliography Dealing with Extra-Curricular Activities in Elementary and High Schools*. University of Illinois Bulletin, Vol. 23, No. 24, Educational Research Bulletin, No. 29. Urbana, Ill.: the University, 1926. 40 p.
572. OHIO STATE UNIVERSITY. *Eighth Annual Report of the Auditor of Student Organizations, 1929-30*. Columbus: Ohio State University Press, 1930. 105 p.
573. ONTHANK, KARL W. "Personnel Management Methods Applied to College Activities." *Education* 48: 416-21; March, 1928.
574. OSTERBERG, HILDUR C. "A Study of the Load of Senior High School Pupils in Los Angeles." *School Review* 36: 359-69; May, 1928.
575. PARLIN, H. T. *A Brief History of the Regulation of Fraternities in the University of Texas*. University of Texas Bulletin, No. 1737. Austin, Tex.: the University, 1917. 83 p.
576. PECK, HOMER N. "The Relationship between Participation in Extra-Curricular Activities in High School and Success in Adult Life." *Summary of Investigations Relating to Extra-Curricular Activities*. (Edited by Earle U. Rugg). Greeley, Colo.: Colorado State Teachers College, 1930. Chapter 19, p. 279-92.
577. PETTIT, WALTER W. *Self-Supporting Students in Certain New York City High Schools*. New York: New York School of Social Work, 1920. 87 p.
578. PIERCE, PAUL R., and GOODMAN, TOBEY R. "The Elementary-School Newspaper." *Elementary School Journal* 31: 779-88; June, 1931.
579. POFFENBERGER, ALBERT THEODORE. "School Achievement and Success in Life." *Journal of Applied Psychology* 9: 22-28; March, 1925.
580. POLLARD, L. J. "The Use of 'Points Systems' in Colleges and Universities." *School and Society* 22: 727-28; December 5, 1925.
581. POTT, WILLIAM S. A. "The Honor System of Virginia." *Education* 33: 303-11; January, 1913.
582. POUND, OLIVIA. *Extracurricular Activities of High School Girls*. New York: A. S. Barnes and Co., 1931. 97 p.
583. POWELL, LEWIS. "Surveys of Student Self-Government." *Yearbook, 1930*. New York: National Student Federation of the United States of America, 1930. p. 29-32.
584. POWER, H. D. "The Effect of Competitive Athletics on Scholarship." *California State Journal of Medicine* 11: 392-97; October, 1913.

585. PURDUE UNIVERSITY. *The Report of the Student Committee of Seventeen*. Purdue University Bulletin, Vol. 27, No. 7, Studies in Higher Education, No. 6. Lafayette, Ind.: the University, 1926. 32 p.
586. REEVES, DE GARIS. "Credit for Extra-Curriculum Activities." *American Educational Digest* 46: 393-95; May, 1927.
587. REEVES, FLOYD W., and OTHERS. *The Liberal Arts College*. Chicago: University of Chicago Press, 1932. 715 p.
588. RIEBE, H. A. *The Influence of Extra-Academic and Extra-Mural Activities upon Scholarship in Secondary Schools*. Unpublished master's thesis, University of Wisconsin, 1923.
589. RINGDAHL, N. ROBERT. "High School Student Councils." *School Review* 36: 329-37; May, 1928.
590. ROBERTS, ALEXANDER CRIPPEN, and DRAPER, EDGAR MARIAN. *Extraclass and Intramural Activities in High Schools*. Boston: D. C. Heath and Co., 1928. 529 p.
591. ROBERTS, ALEXANDER CRIPPEN, and DRAPER, EDGAR MARIAN. *The High School Principal as Administrator, Supervisor, and Director of Extra-Curricular Activities*. Boston: D. C. Heath and Co., 1927. 335 p.
592. ROEMER, J., and ALLEN, C. F. *Extra-Curricular Activities in Junior and Senior High Schools*. Boston: D. C. Heath and Co., 1926. 333 p.
593. ROEMER, J., and ALLEN, C. F. *Readings in Extra-Curricular Activities*. Richmond, Va.: Johnson Publishing Co., 1929. 844 p.
594. ROGERS, F. R. *The Scholarship of Athletes*. Unpublished master's thesis, Stanford University, 1922.
595. ROHRBACH, Q. A. W. *Non-Athletic Student Activities in the Secondary School*. Philadelphia: Westbrook Publishing Co., 1925. 223 p.
596. RUGG, EARLE U. "Special Types of Activities: Student Participation in School Government." *Extra-Curricular Activities*. Twenty-fifth Yearbook, Part 2. National Society for the Study of Education. Bloomington, Ill.: Public School Publishing Co., 1926. Chapter 11, p. 127-40.
597. RUGG, EARLE U., editor, and OTHERS. *Summary of Investigations Relating to Extra-Curricular Activities*. Colorado Teachers College Education Series, No. 9. Greeley, Colo.: Colorado State Teachers College, 1930. 304 p.
598. RUSSELL, R. D. "How Shall Our Schools Be Governed?" *Nation's Schools* 6: 41-46; August, 1930.
599. RYAN, H. H. "The Government of the School." *Seventh Yearbook*. Berwyn, Ill.: National Association of Secondary-School Principals (H. V. Church, sec.), 1923. p. 44-48.
600. SATCHELL, J. KENNETH. "Student Participation in School Administration." *School Review* 30: 733-41; December, 1922.
601. SAVAGE, HOWARD J., and OTHERS. *American College Athletics*. Bulletin, No. 23. New York: Carnegie Foundation for the Advancement of Teaching, 1929. 383 p.
602. SHANNON, J. R. "The Post-School Careers of High-School Leaders and High-School Scholars." *School Review* 37: 656-65; November, 1929.
603. SHUTTLEWORTH, FRANK K. *The Measurement of the Character and Environmental Factors Involved in Scholastic Success*. University of Iowa Studies in Character, Vol. 1, No. 2. Iowa City: the University, 1927. 80 p.
604. STITELER, C. A. "Social Activity Record of Junior High School Students in the Tenth Grade." *Thirteenth Annual Schoolmen's Week Proceedings*. Philadelphia: University of Pennsylvania Press, 1926. p. 298-301.
605. STOKES, STUART M., and CLINE, W. F. "The Avocations of 100 College Freshmen." *Journal of Applied Psychology* 13: 257-65; June, 1929.
606. STRANG, RUTH. "Knowledge of Social Usages in Junior and Senior High Schools." *School and Society* 34: 709-12; November 21, 1931.
607. STRANG, RUTH. "Relation of Social Intelligence to Certain Other Factors." *School and Society* 32: 268-72; August 23, 1930.
608. STRUM, ARTHUR L. "Administration of Athletics in Teachers Colleges." *Teachers' College Journal (Indiana State Teachers College)* 1: 161-64; July, 1930.
609. SWANSON, A. M. "The Effect on High-School Scholarship of Pupil Participation in Extra-Curricular Activities." *School Review* 32: 613-26; October, 1924.
610. TAYLOR, WALTER M. "A Bibliography of Objective Studies in Extra-Curricular Activities." *Junior-Senior High School Clearing House* 5: 425-27; March, 1931.

611. TERRY, PAUL W. "Administration of Extra-Curriculum Activities in the High School." *School Review* 33: 734-43; December, 1925. 34: 15-24; January, 1926.
612. TERRY, PAUL W. "Cooperation of Teacher Advisors." *Extra-Curricular Activities*. Twenty-fifth Yearbook, Part 2. National Society for the Study of Education. Bloomington, Ill.: Public School Publishing Co., 1926. Chapter 9, p. 101-10.
613. TERRY, PAUL W. *Extra-Curricular Activities in the Junior High School*. Baltimore: Warwick and York, 1926. 122 p.
614. TERRY, PAUL W. "The Social Experiences of Junior High School Pupils. II." *School Review* 35: 272-80; April, 1927.
615. TERRY, PAUL W. "Summary of Investigations of Extra-Curriculum Activities in 1929." *School Review* 38: 605-12; 663-72; October, November, 1930.
616. TERRY, PAUL W. "Summary of Investigations of Extra-Curriculum Activities in 1930." *School Review* 40: 124-37; 182-91; February, March, 1932.
617. TERRY, PAUL W. "Summary of Investigations of Extra-Curriculum Activities in 1931." *School Review* 40: 505-14; 613-19; September, October, 1932.
618. TERRY, PAUL W. *Supervising Extra-Curricular Activities in the American Secondary School*. New York: McGraw-Hill Book Co., 1930. 417 p.
619. THORNHILL, R. E., and LANDIS, CARNEY. "Extra-Curricular Activity and Success." *School and Society* 28: 117-20; July 28, 1928.
620. THWING, CHARLES F. *A History of Higher Education in America*. New York: D. Appleton and Co., 1906. 501 p.
621. TOWELL, J. F. "The Social and Educational Status of the Pupils in a Residential Suburban Community." *School Review* 37: 49-58; January, 1929.
622. UMSTATT, JAMES G. *Student Self-Support at the University of Minnesota*. Minneapolis, Minn.: University of Minnesota Press, 1932. 205 p.
623. VAN WAGENEN, BEULAH. *Extra-Curricular Activities in the Colleges of the United Lutheran Church in America*. Contributions to Education, No. 380. New York: Teachers College, Columbia University, 1929. 156 p.
624. VINEYARD, JERRY J., and POOLE, CHARLES F. *Student Participation in School Government*. New York: A. S. Barnes and Co., 1930. 104 p.
625. VOELKER, EDGAR W. "The Organization and Functioning of Pupil Opinion in High-School Control." *School Review* 34: 654-67; November, 1926.
626. VOGT, PAUL L. "Why Students Fail." *School and Society* 30: 847-48; December, 1929.
627. WAGNER, M. CHANNING. "The Supervision of Extra-Curriculum Activities in Secondary School." *Bulletin (Proceedings)* No. 25: 93-112; March, 1929. Berwyn, Ill.: Department of Secondary-School Principals, National Education Association (H. V. Church, sec.).
628. WALTERS, RAYMOND. "The Scholastic Training of Eminent American Engineers." *School and Society* 13: 322-29; March 12, 1921.
629. WARNOCK, A. R. "Student Self-Government." *School and Society* 13: 696-97; June 18, 1921.
630. WELLS, GEORGE C., and McCALISTER, WAYDE H. *Student Publications*. New York: A. S. Barnes and Co., 1930. 180 p.
631. WERNER, OSCAR HELMUTH. *Every College Student's Problems*. New York: Silver, Burdett and Co., 1929. 370 p.
632. WILDS, ELMER HARRISON. *Extra-Curricular Activities*. New York: Century Co., 1926. 273 p.
633. WISE, J. HOOPER, and ROEMER, JOSEPH. *A Study of the Extra-Curricular Activities in the Public High Schools of Florida*. University Record, Vol. 20, No. 1. Gainesville, Fla.: University of Florida, 1925. 198 p.
634. WOODY, CLIFFORD, and CHAPPELLE, E. H. "Pupil-Participation in the Extra-Curricular Activities in the Smaller High Schools of Michigan." *Extra-Curricular Activities*. Twenty-fifth Yearbook, Part 2. National Society for the Study of Education. Bloomington, Ill.: Public School Publishing Co., 1926. Chapter 7, p. 81-96.
635. WORCESTER, D. A. "Fraternities and Scholarship." *School and Society* 18: 147-48; August 4, 1923.

Chapter VIII. Adjustments and Classifications in Colleges and Universities

636. AYDELOTTE, FRANK. *Honors Courses in American Colleges and Universities*. Bulletin of the National Research Council, Vol. 7, No. 40. Washington, D. C.: the Council, 1924. 57 p.
637. BAKER, HARRY J., chairman, and OTHERS. "Tests of Intelligence and Aptitude." *Review of Educational Research* 2: 271-342; October, 1932. Washington, D. C.: American Educational Research Association, a department of the National Education Association.
638. BOOK, WILLIAM F. "How Well College Students Can Read." *School and Society* 26: 242-48; August 20, 1927.
639. BOOK, WILLIAM F. "Results Obtained in a Special 'How To Study' Course Given to College Students." *School and Society* 26: 529-34; October 22, 1927.
640. BROADY, KNUTE O. *School Provision for Individual Differences*. Contributions to Education, No. 395. New York: Teachers College, Columbia University, 1930. 101 p.
641. BROOKS, ROBERT C. *Reading for Honors at Swarthmore*. New York: Oxford University Press, 1927. 196 p.
642. BROWN, RUTH A. *A Comparison of Data on Freshmen Entering the University of Michigan in the Fall of 1927*. University of Michigan Administrative Studies, Vol. 1, No. 1. Ann Arbor, Mich.: the University, 1930. 94 p.
643. BURTT, HAROLD E., and OTHERS. "Efficiency of Instruction in Unselected Sections in Elementary Psychology Compared with That in Sections Selected on Basis of Intelligence Tests." *Journal of Educational Psychology* 14: 154-61; March, 1923.
644. COLTON, HAROLD SELLERS. "Segregation of Zoology Students on the Basis of Ability." *School and Society* 20: 254-56; August 23, 1924.
645. CONSTANCE, JENNIE M., and HANNA, JOSEPH V. "An Experiment in Sectioning Freshman English." *Educational Review* 67: 150-53; March, 1924.
646. COWLEY, W. H. *The Personnel Bibliographical Index*. Columbus: Ohio State University, 1932. 433 p.
647. CRAWFORD, C. C. "Some Results of Teaching College Students How To Study." *School and Society* 23: 471-72; April 10, 1926.
648. CREEK, HERBERT LESEOURD, and MCKEE, JAMES HUGH. *The Preparation in English of Purdue Freshmen*. Purdue University Bulletin, Vol. 27, No. 6. Studies in Higher Education, No. 5. Lafayette, Ind.: the University, 1926. 48 p.
649. DEXTER, EMILY S. "Intelligence-Test Score and Major Subject." *School and Society* 30: 779-80; December 7, 1929.
650. GAMBRILL, BESSIE LEE. "Some Administrative Uses of Intelligence Tests in the Normal School." *Intelligence Tests and Their Use*. Twenty-first Yearbook, Part 2. National Society for the Study of Education. Bloomington, Ill.: Public School Publishing Co., 1922. Chapter 8, p. 223-43.
651. GRAY, WILLIAM S., editor. *Provision for the Individual in College Education*. Proceedings of the Institute for Administrative Officers of Higher Institutions, Vol. 4. Chicago: University of Chicago Press, 1932. 262 p.
652. GUILER, WALTER S. "Improving College Freshmen in Spelling." *Journal of Educational Research* 24: 209-15; October, 1931.
653. GUILER, WALTER S. "A Program of Diagnostic and Remedial Instruction." *Yearbook, 1927*. Washington, D. C.: American Association of Teachers Colleges, a department of the National Education Association.
654. HAVENS, GEORGE R. "General Reading for Undergraduates; Report of Committee G." *Bulletin of the American Association of University Professors* 10: 108-20; October, 1924.
655. HOLT, LUCIUS H. "Sectioning on the Basis of Ability." *The Effective College*. (Edited by Robert Lincoln Kelly). New York: Association of American Colleges, 1928. Chapter 12, p. 127-34.
656. JAMES, H. W. "The Dalton Plan Tested in College." *School Review* 34: 303-6; April, 1926.
657. JOHNSTON, J. B. "The Adjustment of the Curriculum to the Individual Student, Including Preentrance Advising." *Changes and Experiments in Liberal-Arts*

- Education*. Thirty-first Yearbook, Part 2. National Society for the Study of Education. Bloomington, Ill.: Public School Publishing Co., 1932. p. 181-86.
658. JONES, EDWARD SAFFORD. "The Preliminary Course on 'How To Study' for Freshmen Entering College." *School and Society* 29: 702-5; June 1, 1929.
 659. KINDER, J. S., and ODELL, C. W. *Educational Tests for Use in Institutions of Higher Learning*. University of Illinois Bulletin, Vol. 27, No. 49, Educational Research Circular, No. 55. Urbana, Ill.: the University, 1930. 95 p.
 660. KLEIN, ARTHUR J., director. *Survey of Land-Grant Colleges and Universities*. Vol. 1. U. S. Dept. of the Interior, Office of Education, Bulletin, 1930, No. 9. Washington, D. C.: Government Printing Office, 1930. p. 470-71.
 661. LANGLEIE, T. A. "The Iowa Placement Examinations at the University of Minnesota." *Journal of Engineering Education* 17: 842-60; May, 1927.
 662. LEMON, ALLAN CLARK. *An Experimental Study of Guidance and Placement of Freshmen in the Lowest Decile of the Iowa Qualifying Examination*. 1925. University of Iowa Studies in Education, Vol. 3, No. 8. Iowa City: the University, 1927. 135 p.
 663. LESSINGER, W. E. "An Experiment in Individualized Instruction on the College Level." *Studies in Education*. Sixteenth Yearbook. National Society of College Teachers of Education. Chicago: University of Chicago Press, 1928. p. 36-41.
 664. LOWELL, A. LAWRENCE. "General Examinations and Tutors in Harvard College." *Educational Record* 8: 61-84; April, 1927.
 665. MACPHAIL, ANDREW H. "Classification of Freshmen at Brown University." *Journal of Educational Research* 14: 365-69; December, 1926.
 666. MACPHAIL, ANDREW H. *The Intelligence of College Students*. Baltimore: Warwick and York, 1924. 176 p.
 667. MANN, CLAIR V. "An Evaluation of Placement Examinations." *Journal of Engineering Education* 19: 288-300; November, 1928.
 668. MAXWELL, C. R. "Report of Investigation of the Methods by Which Institutions of Higher Learning Adapt Their Work to the Needs of Freshmen." *North Central Association Quarterly* 2: 307-28; December, 1927.
 669. MILLER, H. W. "Segregation on the Basis of Ability." *School and Society* 26: 84-88; 114-20; July 16, July 23, 1927.
 670. MUNRO, GEORGE W. *Selected Sections at Double Pace*. Purdue University Bulletin, Vol. 27, No. 4, Studies in Higher Education No. 7. Lafayette, Ind.: the University, 1926. 20 p.
 671. National Society for the Study of Education. *Changes and Experiments in Liberal-Arts Education*. Thirty-first Yearbook, Part 2. Bloomington, Ill.: Public School Publishing Co., 1932. 310 p.
 672. PARR, FRANK W. "The Extent of Remedial Reading Work in State Universities in the United States." *School and Society* 31: 547-48; April 19, 1930.
 673. PARR, FRANK W., and NEMZEK, CLAUDE L. "The Inefficient Silent Reader in College." *Peabody Journal of Education* 7: 299-303; March, 1930.
 674. PERRY, RALPH BARTON. "The Preceptorial or Tutorial System: Report by Committee G." *Bulletin of the American Association of University Professors* 10: 36-64; November, 1924.
 675. PRESSEY, LUELLA COLE. "The Permanent Effects of Training in Methods of Study on College Success." *School and Society* 28: 403-4; September 29, 1928.
 676. PRESSEY, SIDNEY L., and OTHERS. *Research Adventures in University Teaching*. Bloomington, Ill.: Public School Publishing Co., 1927. 152 p.
 677. PYLE, W. H. "The Relation of Ability to Achievement." *School and Society* 22: 406-8; September 26, 1925.
 678. RAUBENHEIMER, ALBERT S., and TOUTON, FRANK C. "Present Status of the Use of Objective Tests in Institutions of Higher Learning." *Quantitative Measurement in Institutions of Higher Learning*. Eighteenth Yearbook. National Society of College Teachers of Education. Chicago: University of Chicago Press, 1930. p. 73-87.
 679. REEVES, FLOYD W. "Experiments in the Improvement of Instruction in Junior College." *Proceedings*, 1928. Nashville, Tenn.: American Association of Junior Colleges (Doak S. Campbell, sec., George Peabody College), 1928. v. 74-83.
 680. REEVES, FLOYD W., and OTHERS. *The Liberal Arts College*. Chicago: University of Chicago Press, 1932. 715 p.

681. REMMERS, H. H. *A Report of Progress of a Diagnostic and Remedial Study of Failing Students at Purdue University*. Purdue University Bulletin, Vol. 27, No. 14. Lafayette, Ind.: the University, 1927.
682. REMMERS, H. H. *A Study of Freshman Placement Tests at Purdue University, 1926-29*. Purdue University Bulletin, Vol. 29, No. 13, Studies in Higher Education, No. 12. Lafayette, Ind.: the University, 1929. 44 p.
683. ROCKWELL, L. L. "Honors Courses in English in American Colleges." *English Journal* 15: 336-43; May, 1926.
684. RUMI, BEARDSLEY. *The Reliability of Mental Tests in the Division of an Academic Group*. Psychological Monographs, Vol. 24, No. 4. Whole No. 105. Princeton, N. J.: Psychological Review Co., 1917. 63 p.
685. SCHOONMAKER, HAZEL E. "The Value of Hotz Algebra Scales in Sectioning College Classes in Freshman Mathematics." *School Science and Mathematics* 28: 880-84; November, 1928.
686. SEASHORE, CARL E. *Learning and Living in College*. University of Iowa Studies, Vol. 2, No. 1. Series on Aims and Progress of Research. Iowa City: the University, 1927. 124 p.
687. SEASHORE, CARL E. "The Placement Examination as a Means for the Early Discovery and Motivation of the Future Scholar." *Association of American Universities, Twenty-seventh Annual Conference, 1925*. Chicago: University of Chicago Press, 1925. p. 50-56.
688. SEASHORE, CARL E. "Sectioning Classes on the Basis of Ability." *School and Society* 15: 353-58; April 1, 1922.
689. SINCLAIR, J. H., and TAYLOR, MARY BARBARA. "Honors Work in Institutions Accredited by the Association of American Universities." *School and Society* 33: 247-50; February 14, 1931.
690. STOCKWELL, S. S. "Normal School Experiment with the Dalton Plan." *Education* 46: 12-17; September, 1925.
691. TERMAN, LEWIS M. "The Independent Study Plan at Stanford University." *School and Society* 24: 96-98; July 24, 1926.
692. THARP, J. B. "Sectioning Classes in Romance Languages." *Modern Language Journal* 12: 95-114; November, 1927.
693. THOMPSON, WILLIAM H. "An Experiment in Remedial Reading." *School and Society* 34: 156-58; August 1, 1931.
694. TOEVS, ETHEL, and EMERSON, D. A. "Sex Differences in College Scholarship." *Educational Administration and Supervision* 11: 202-10; March, 1925.
695. ULLRICH, OSCAR ALVIN. *An Experimental Study of the Effect on Learning of Sectioning College Classes on the Basis of Ability*. Doctor's thesis, University of Texas, 1926. 55 p.
696. WATSON, GOODWIN, and NEWCOMB, THEODORE M. "Improving Reading Ability among Teachers College Students." *Teachers College Record* 31: 535-39; March, 1930.
697. WITTY, PAUL A., and LEHMAN, HARVEY C. "Teaching the College Student 'How To Study'." *Education* 48: 47-56; September, 1927.
698. WOOD, BEN D. *Measurement in Higher Education*. Yonkers-on-Hudson, N. Y.: World Book Co., 1923. 337 p.

Chapter IX. Special Education

699. ART, HENRY EDWARD. *The Care, Cure, and Education of the Crippled Child*. Elyria, Ohio: International Society for Crippled Children, 1924. 222 p.
700. ALLEN, EDWARD E. *Special Features in the Education of the Blind during the Biennium, 1918-20*. U. S. Dept. of the Interior, Bureau of Education, Bulletin, 1921, No. 16. Washington, D. C.: Government Printing Office, 1921. 14 p.
701. AMOSS, HARRY, and DE LA PORTE, L. HELEN. *Training Handicapped Children*. Toronto, Canada: Ryerson Press, 1933. 328 p.
702. ANDERSON, META L. *Education of Defectives in the Public Schools*. Yonkers-on-Hudson, N. Y.: World Book Co., 1917. 104 p.
703. BERRY, CHARLES SCOTT. *The Education of Handicapped School Children in Michigan*. Bulletin, No. 11. Lansing, Mich.: State Department of Public Instruction, 1926. 56 p.

704. BERRY, CHARLES SCOTT, and STODDARD, CLARA B. "An Experiment with Lispers." *Journal of Applied Psychology* 13: 543-53; December, 1929.
705. BERRY, CHARLES SCOTT, director. *The Department of Special Education*. Detroit: Board of Education, 1925. 39 p.
706. BEST, HARRY. *The Blind: Their Condition and the Work Being Done for Them in the United States*. New York: Macmillan Co., 1919. 763 p.
707. BEST, HARRY. *The Deaf: Their Position in Society and the Provision for Their Education in the United States*. New York: Thomas Y. Crowell Co., 1914. 340 p.
708. BLANTON, SMILEY. "A Survey of Speech Defects." *Journal of Educational Psychology* 7: 581-92; December, 1916.
709. BONNER, H. R. *Schools and Classes for the Blind, 1917-18*. U. S. Dept. of the Interior, Bureau of Education, Bulletin, 1919, No. 78. Washington, D. C.: Government Printing Office, 1920. 23 p.
710. BONNER, H. R. *Schools for the Deaf, 1917-18*. U. S. Dept. of the Interior, Bureau of Education, Bulletin, 1919, No. 79. Washington, D. C.: Government Printing Office, 1920. 40 p.
711. BORDEN, RICHARD C., and BUSSE, ALVIN C. *Speech Correction*. New York: F. S. Crofts and Co., 1925. 295 p.
712. BROADY, KNUTE O. *School Provision for Individual Differences*. Contributions to Education, No. 395. New York: Teachers College, Columbia University, 1930. p. 5-28, 72-93.
713. BRUNER, FRANK G. *Report of the Director of Special Schools, for the School Year 1922-23*. Chicago: Board of Education, 1924. 178 p.
714. CAMPBELL, MARY R. *Report on an Investigation Concerning the Present Technical Status of Educational Work with Deaf, Blind, Subnormal, and Feeble-minded in the United States*. Department of Special Education, National Education Association, 1905. 8 p. (See also her "Extracts from a Recent Investigation in Sociology." *Proceedings*, 1905. Washington, D. C.: National Education Association. p. 906-14.)
715. CHATTERTON, CARL C. "State Institutions for Indigent Crippled Children." *Nation's Health* 5: 688-90, 748; October 15, 1923.
716. CLEVELAND, ELIZABETH. "Detroit's Experiment with Gifted Children." *School and Society* 12: 179-83; September 11, 1920.
717. CLEVELAND PUBLIC SCHOOLS. *Report of the Superintendent of Schools, for the School Year 1927-28*. Cleveland: Board of Education, 1928. p. 91-107.
718. CLEVELAND PUBLIC SCHOOLS. *The Special Schools and Curriculum Centers; Report of the Superintendent of Schools, 1929-30*. Cleveland: Board of Education, 1931. "Cleveland Special Schools," p. 11-115.
719. CLEVELAND SOCIETY FOR THE BLIND. *The Blind in Cleveland*. Cleveland: the Society, 1918. 72 p.
720. COOLEY, EDWIN J. *Probation and Delinquency*. New York: Thomas Nelson and Sons, 1927. 544 p.
721. COWDERY, KATE LOUISE. *The Legal Status of the Education of Blind and Deaf Children in the Forty-Eight States*. Unpublished master's thesis, Ohio State University, 1927. 85 p.
722. COY, GENEVIEVE LENORE. *The Interests, Abilities, and Achievements of a Special Class for Gifted Children*. Contributions to Education, No. 131. New York: Teachers College, Columbia University, 1923. 194 p.
723. DAY, HERBERT E.; FUSFELD, IRVING S.; and PINTNER, RUDOLF. *A Survey of American Schools of the Deaf, 1924-25*. Washington, D. C.: National Research Council, 1928. 296 p.
724. FAY, EDWARD ALLEN, editor. *Histories of American Schools for the Deaf, 1817-1893*. Washington, D. C.: Volta Bureau, 1893. 3 vols.
725. FUSFELD, IRVING S. "The Survey of Schools for the Deaf." *American Annals of the Deaf* 70: 391-421, November, 1925. 71: 97-135, March, 1926; 284-348, September, 1926.
726. GODDARD, HENRY HERBERT. *School Training of Gifted Children*. Yonkers-on-Hudson, N. Y.: World Book Co., 1928. 226 p.
727. HADLEY, HAZEL C. *Educating Crippled Children in Ohio*. Columbus, Ohio: State Department of Education, 1927. 134 p.
728. HADLEY, HAZEL C. *Sight-Saving Classes in the Public Schools*. Columbus, Ohio: State Department of Education, 1927. 90 p.

729. HADLEY, HAZEL C., and HATHAWAY, WINIFRED. *Sight-Saving Classes; Their Organization and Administration*. Publication, No. 30. New York: National Committee for the Prevention of Blindness, 1927. 50 p.
730. HALL, PERCIVAL. *Education of the Deaf*. U. S. Dept. of the Interior, Bureau of Education, Bulletin, 1921, No. 14. Washington, D. C.: Government Printing Office, 1921. 16 p.
731. HAMILTON, SAMUEL W., and HABER, ROY. *Summaries of State Laws Relating to the Feeble-minded and the Epileptic*. New York: National Committee for Mental Hygiene, 1917. 240 p.
732. HARE, HELEN. *A Study of Handicapped Children*. Indiana University Studies, Vol. 6, No. 41. Bloomington, Ind.: the University, 1919. 64 p.
733. HEALY, WILLIAM. *The Individual Delinquent*. Boston: Little, Brown and Co., 1915. 830 p.
734. HEALY, WILLIAM, and OTHERS. *Reconstructing Behavior in Youth; a Study of Problem Children in Foster Families*. New York: Alfred A. Knopf, 1929. 325 p.
735. HECK, ARCH O. *Education of Crippled Children*. U. S. Dept. of the Interior, Office of Education, Bulletin, 1930, No. 11. Washington, D. C.: Government Printing Office, 1930. 57 p.
736. HECK, ARCH O. *Special Schools and Classes in Cities of 10,000 Population and More in the United States*. U. S. Dept. of the Interior, Office of Education, Bulletin, 1930, No. 7. Washington, D. C.: Government Printing Office, 1930. 33 p.
737. HENRY, THEODORE S. *Classroom Problems in the Education of Gifted Children*. Nineteenth Yearbook, Part 2. National Society for the Study of Education. Bloomington, Ill.: Public School Publishing Co., 1920. 125 p.
738. HILLEBOE, GUY L. *Finding and Teaching Atypical Children*. Contributions to Education, No. 423. New York: Teachers College, Columbia University, 1930. 177 p.
739. HOLLINGWORTH, LETA S. *Gifted Children: Their Nature and Nurture*. New York: Macmillan Co., 1926. 374 p.
740. HORN, JOHN LOUIS. *The Education of Exceptional Children*. New York: Century Co., 1924. 343 p.
741. HOWETT, HARRY H. "Legislating for Crippled Children." *Welfare Magazine* 19: 624-37; May, 1928.
742. KESSECKER, WARD W. *Digest of Legislation for Education of Crippled Children*. U. S. Dept. of the Interior, Bureau of Education, Bulletin, 1929, No. 5. Washington, D. C.: Government Printing Office, 1929. 13 p.
743. KINGSLEY, SHERMAN C., and DRESSLAR, F. B. *Open-Air Schools*. U. S. Dept. of the Interior, Bureau of Education, Bulletin, 1916, No. 23. Washington, D. C.: Government Printing Office, 1916. 283 p.
744. LAMSON, EDNA EMMA. *A Study of Young Gifted Children in Senior High School*. Contributions to Education, No. 424. New York: Teachers College, Columbia University, 1930. 117 p.
745. LAWES, ESTELLA. *Methods of Teaching Sight-Saving Classes*. Publication, No. 28. New York: National Committee for the Prevention of Blindness, 1926. 60 p.
746. LEMMON, RAYMOND A. *The Status of the Education of Speech Defectives in Public Schools of the United States*. Unpublished master's thesis, Ohio State University, 1931. 64 p.
747. LONG, JOHN A. *Motor Abilities of Deaf Children*. Contributions to Education, No. 514. New York: Teachers College, Columbia University, 1932. 67 p.
748. LOS ANGELES CITY SCHOOLS. *Education of the Physically Handicapped*. School Publication, No. 215. Los Angeles: City School District, 1931. 38 p.
749. McCULLOUGH, GRACE A., and BIRMINGHAM, AGNES V. *Correcting Speech Defects and Foreign Accent*. New York: Charles Scribner's Sons, 1925. 232 p.
750. MACDONALD, NEIL S. *Open-Air Schools*. Toronto, Canada: McClelland, Goodchild and Stewart, 1918. 127 p.
751. McDONALD, ROBERT ALEXANDER FYFE. *The Adjustments of School Organization to Various Population Groups*. Contributions to Education, No. 75. New York: Teachers College, Columbia University, 1915. 145 p.
752. McDOWELL, ELIZABETH DICKINSON. *Educational and Emotional Adjustments of Stuttering Children*. Contributions to Education, No. 314. New York: Teachers College, Columbia University, 1928. 59 p.
753. McMURTRIE, DOUGLAS C. *Bibliography of the Education and Care of Crippled Children*. New York: D. C. McMurtrie (now Plandome Press), 1913. 99 p.

754. MADDEN, RICHARD. *The School Status of the Hard of Hearing Child*. Contributions to Education, No. 499. New York: Teachers College, Columbia University, 1931. 64 p.
755. METZNER, ALICE B., and ENGEL, ANNA M. *Course of Study for Special Classes; Types "A" and "B."* Detroit: Board of Education, 1926. 95 p.
756. MORRISON, CAROLYN E. "Speech Defects in Young Children." *Psychological Clinic* 8: 138-42; October 15, 1914.
757. MORT, PAUL R. "The Uses of Psychological Tests for Atypical Groups." *Review of Educational Research* 2: 308-20, 338-41; October, 1932. Washington, D. C.: American Educational Research Association, a department of the National Education Association.
758. NATIONAL SOCIETY FOR THE STUDY OF EDUCATION. *Report of the Society's Committee on the Education of Gifted Children*. Twenty-third Yearbook, Part 1. Bloomington, Ill.: Public School Publishing Co., 1924. 443 p.
759. NEW JERSEY STATE TEMPORARY COMMISSION FOR INQUIRY RELATING TO THE DISTRIBUTION AND CONDITION OF CRIPPLED CHILDREN. *Report*. Trenton, N. J.: MacCrellish and Quigley Co., 1928. 47 p.
760. NEW YORK CITY BOARD OF EDUCATION. *Twenty-third Annual Report of the Superintendent of Schools, 1921—Reports on Special Classes*. New York: the Board, 1922. 227 p.
761. NEWARK BOARD OF EDUCATION. *School for the Deaf*. Monograph, No. 8, Part 2. Newark, N. J.: the Board, 1921. 43 p.
762. PEPPARD, HELEN M. *The Correction of Speech Defects*. New York: Macmillan Co., 1925. 180 p.
763. PHILLIPS, FRANK M. *Schools and Classes for Feeble-Minded and Subnormal Children, 1926-27*. U. S. Dept. of the Interior, Bureau of Education, Bulletin, 1928, No. 5. Washington, D. C.: Government Printing Office, 1928. 21 p.
764. PHILLIPS, FRANK M. *Schools and Classes for the Blind, 1926-27*. U. S. Dept. of the Interior, Bureau of Education, Bulletin, 1928, No. 9. Washington, D. C.: Government Printing Office, 1928. 7 p.
765. PHILLIPS, FRANK M. *Schools for the Deaf, 1926-27*. U. S. Dept. of the Interior, Bureau of Education, Bulletin, 1928, No. 8. Washington, D. C.: Government Printing Office, 1928. 17 p.
766. REEVES, EDITH. *Care and Education of Crippled Children in the United States*. New York: Russell Sage Foundation, 1914. 252 p.
767. REEVES, MARGARET. *Training Schools for Delinquent Girls*. New York: Russell Sage Foundation, 1929. 455 p.
768. ROGERS, JAMES FREDERICK. *Schools and Classes for Delicate Children*. U. S. Dept. of the Interior, Office of Education, Bulletin, 1930, No. 22. Washington, D. C.: Government Printing Office, 1930. 66 p.
769. ROGERS, JAMES FREDERICK. *The Speech Defective School Child*. U. S. Dept. of the Interior, Office of Education, Bulletin, 1931, No. 7. Washington, D. C.: Government Printing Office, 1931. 31 p.
770. ROGERS, JAMES FREDERICK. *Speech Defects and Their Correction*. U. S. Dept. of the Interior, Office of Education, Pamphlet, No. 22. Washington, D. C.: Government Printing Office, 1931. 28 p.
771. ROMAKER, CHARLES CHESTER. *A Study of Schools and Classes under the Control of Boards of Education Which Are for the Education of Blind and Partially Sighted Children in the United States*. Unpublished master's thesis, Ohio State University, 1930. 134 p.
772. ROOT, A. R. "Special Education and the Speech Defective." *Educational Administration and Supervision* 13: 255-65; April, 1927.
773. ROOT, A. R. "A Survey of Speech Defectives in the Public Elementary Schools of South Dakota." *Elementary School Journal* 26: 531-41; March, 1926.
774. SCHEIDEMANN, NORMA V. *The Psychology of Exceptional Children*. Boston: Houghton Mifflin Co., 1931. 520 p.
775. SCRIPTURE, EDWARD WHEELER. *Stuttering, Lispering, and Correction of the Speech of the Deaf*. 2d ed. New York: Macmillan Co., 1923. 290 p.
776. SLAWSON, JOHN. *The Delinquent Boy*. Boston: Richard G. Badger. 1926. 477 p.
777. SOLENERGER, EDITH REEVES. *Public School Classes for Crippled Children*. U. S. Dept. of the Interior, Bureau of Education, Bulletin, 1918, No. 10. Washington, D. C.: Government Printing Office, 1918. 52 p.

778. STEDMAN, LULA M. *Education of Gifted Children*. Yonkers-on-Hudson, N. Y.: World Book Co., 1924. 190 p.
779. STEINER, JESSE WILLIAM. *The Legal Provisions for the Education of Crippled and Feeble-minded Children in the Forty-Eight States*. Unpublished master's thesis, Ohio State University, 1928. 89 p.
780. SUMPTION, MERLE RICHARD. *A Survey To Determine the Number and Location of Physically Handicapped Children of School Age in Ross County, Ohio, and a Proposed Plan for Their Education*. Unpublished master's thesis, Ohio State University, 1932. 93 p.
781. TUTTLE, EMETH. "A Cripple Census Week in North Carolina." *Journal of Social Forces* 1: 255-57; March, 1923.
782. U. S. DEPARTMENT OF LABOR, CHILDREN'S BUREAU. *Dependent and Delinquent Children in Georgia*. Bureau Publication, No. 161. Washington, D. C.: Government Printing Office, 1926. 97 p.
783. U. S. DEPARTMENT OF LABOR, CHILDREN'S BUREAU. *Dependent and Delinquent Children in North Dakota and South Dakota*. Bureau Publication, No. 160. Washington, D. C.: Government Printing Office, 1926. 130 p.
784. UPSHALL, CHARLES CECIL. *Day Schools vs. Institutions for the Deaf*. Contributions to Education, No. 389. New York: Teachers College, Columbia University, 1929. 104 p.
785. UPSON, LENT D., and MATSON, OPAL V. *Crippled Children in Michigan*. Detroit: Harold H. Emmons, Trustee of the George H. Cummings Fund (3400 Union Guardian Building), 1931. 188 p.
786. VAN SICKLE, J. H.; WITMER, LIGHTNER; and AYRES, LEONARD P. *Provision for Exceptional Children in the Public Schools*. U. S. Dept. of the Interior, Bureau of Education, Bulletin, 1911, No. 14. Washington, D. C.: Government Printing Office, 1911. 92 p.
787. WALLIN, J. E. WALLACE. "A Census of Speech Defectives among 89,057 Public-School Pupils—a Preliminary Report." *School and Society* 3: 213-16; February 5, 1916.
788. WALLIN, J. E. WALLACE. *The Education of Handicapped Children*. Boston: Houghton Mifflin Co., 1924. 394 p.
789. WARNER, ROGER B. *The Number of Students in Need of Special Education and Plans for a Central School for Handicapped Children in Delaware County*. Unpublished master's thesis, Ohio State University, 1931. 89 p.
790. WHIPPLE, GUY MONTROSE. *Classes for Gifted Children*. Bloomington, Ill.: Public School Publishing Co., 1919. 151 p.
791. WHITE HOUSE CONFERENCE ON CHILD HEALTH AND PROTECTION. *Special Education; the Handicapped and the Gifted*. New York: Century Co., 1931. 604 p.
792. WILLIAMS, DORTHA EDITH. *The Gifted Child and the Special Class*. Unpublished master's thesis, Ohio State University, 1925.
793. WOOLLEY, HELEN THOMPSON, and FERRIS, ELIZABETH. *Diagnosis and Treatment of Young School Failures*. U. S. Dept. of the Interior, Bureau of Education, Bulletin, 1923, No. 1. Washington, D. C.: Government Printing Office, 1923. 115 p.